

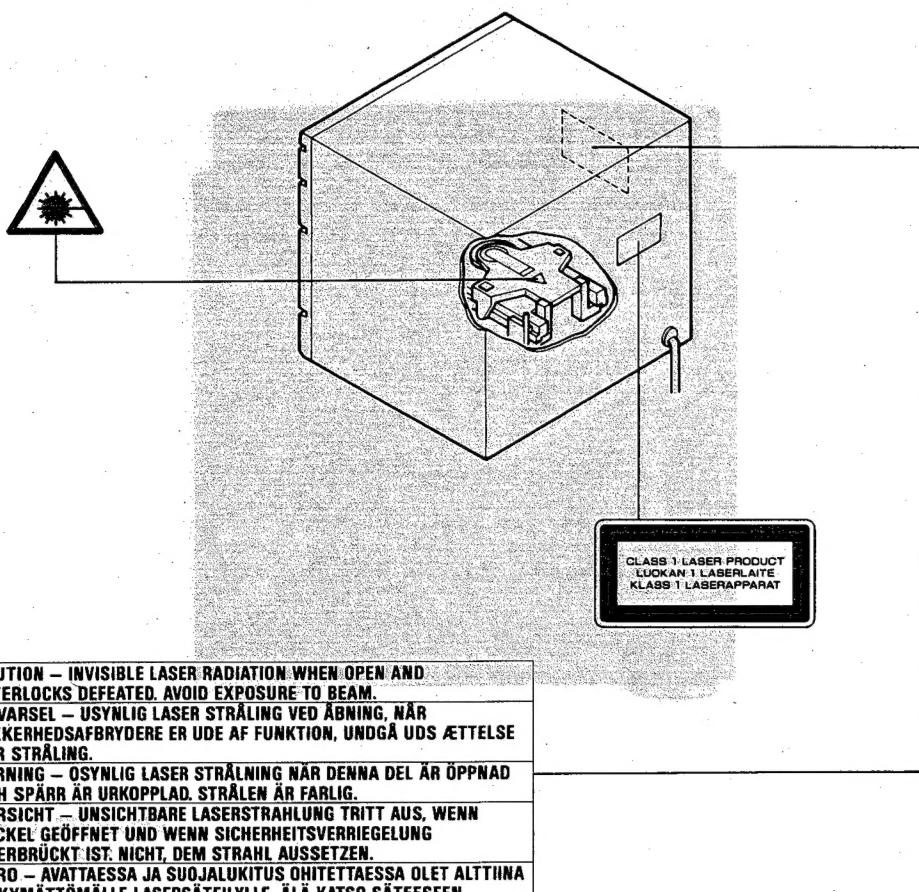
LASER BEAM SAFETY PRECAUTIONS

Do not look directly at the laser beam coming from the pick-up or allow it to strike against your fingers, skin, etc.
Do not apply power if there is a broken part in the laser output section of the pick-up.

Structural Safety Interlock

This model has a disc chuck lever and top lid. This disc chuck lever and top lid prevent to expose the laser beam for users.

INVISIBLE LASER RADIATION EXPOSURE TO BEAM IS DANGEROUS CLASS 1 LASER PRODUCT
OUTPUT POWER : 0.6 mW MAX(Objection Lens) WAVELENGTH : 790 nm



ATTENTION: USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

ACHTUNG - WENN ANDERE ALS DIE HIER SPEZIFIZIERTEN BEDIENUNGS- ODER JUSTIEREINRICHTUNGEN BENÜTZT ODER ANDERE VERFAHRENS-WEISEN AUSGEFÜHRT WERDEN, KANN DIES ZU EINER GEFAHRLICHER STRÄHLUNGSEXPOSITION FÜHREN.

ATTENTION: L'EMPLOI D'ORGANES DE COMMANDE OU DE RÉGLAGE, OU L'EXÉCUTION DE PROCÉDURES, AUTRES QUE CEUX SPÉCIFIÉS DANS LE MODE D'EMPLOI, PEUT PROVOQUER UNE EXPOSITION DANGEREUSE AU RAYONNEMENT.

OPGELET - HET GEBRUIK VAN REGELAARS OF HET MAKEN VAN AFSTELLINGEN E.D. DIE NIET IN DEZE GEBRUIKSAANWIJZING ZIJN BESCHREVEN KAN LEIDEN TOT SCHADELIJKE STRALINGEN.

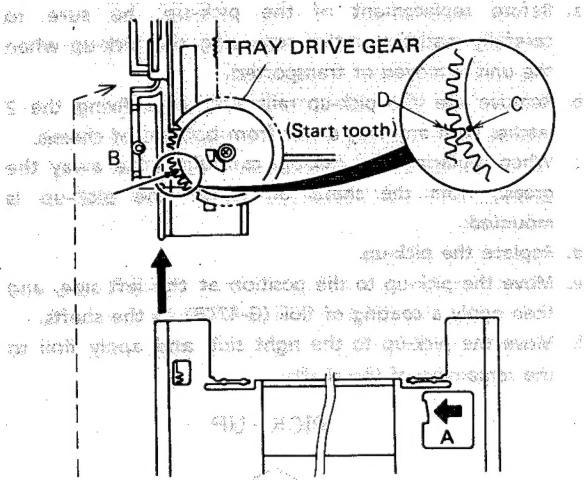
VARNING! OM APPARATEN ANVÄNDS PÅ ANNAT SÄTT ÄN VAD SOM BESKEV I DENNA BRUKSANVISNING, KAN ANVÄNDAREN UTSÄTTAS FÖR OSYNLIG LASERSTRÅLNING, SOM ÖVERSKRIDER GRÄNSEN FÖR LASERKLASS 1.

CAUTELA - L'USO DI COMANDI, AGGIUSTAMENTI O PROCEDIMENTI DIVERSO DA QUELLO QUI SPECIFICATO PUÒ DAR LUOGO AD ESPOSIZIONE A RADIAZIONI PERICOLOSE.

VAROITUS! LAITTEEN KÄYTÄMINEN MUULLA KUIN TÄSSÄ KÄYTÖÖHJEESSÄ MAINITULLA TAVALLA SAATTAA ALTISTAA KÄYTÄJÄN TURVALLISUUSLUOKAN 1 YLITTÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLLE.

DISASSEMBLY (CD MECHANISM)

1. Removal of DISC TRAY



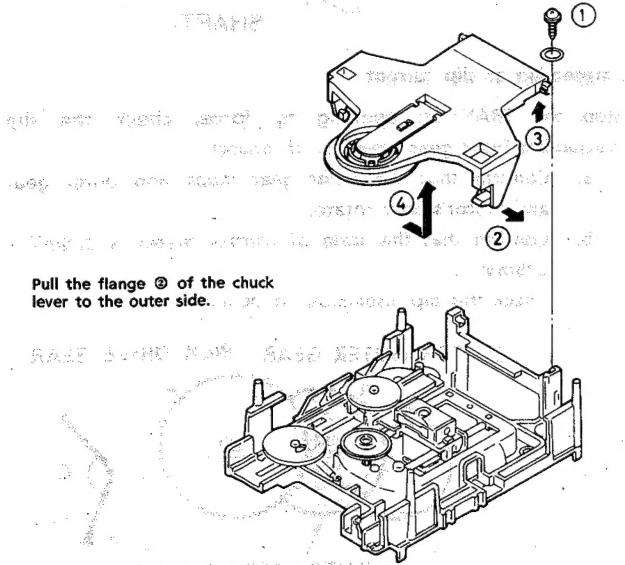
- Drive the mechanism to open end. OPEN / CLOSE Switch : Push ON
- Pull the TRAY off the mechanism. (Push the A rib of the TRAY to the direction of arrow and free from chassis rib.)
- Turn the PICK-UP drive gear (under chucking lever) slowly manual forward clockwise and move the slide to the front end.
- Match the guide groove of TRAY to the chassis guide and insert to the direction of arrow.
- Insert the TRAY to the mechanism after to match the C (tooth bottom) to the D (starting tooth) of TRAY rack. Then complete the close motion by OPEN/CLOSE Switch : Push ON.

Note : Never turn the TRAY drive gear by hand directly in the all mechanism adjustment so that you will not wound the teeth of the TRAY drive gear.

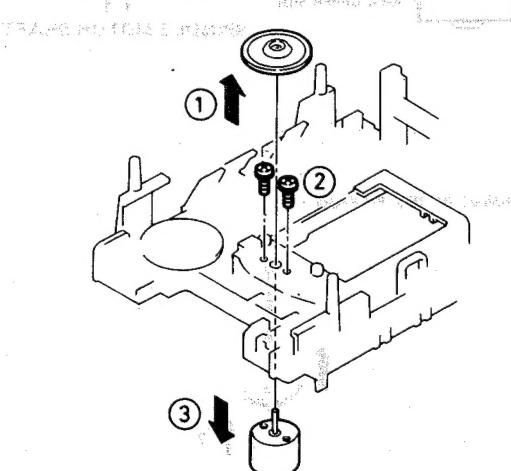
(If the left slide obstructs the special screw, turn the PICK-UP drive gear a little.)

2. Removal of CD Mechanism

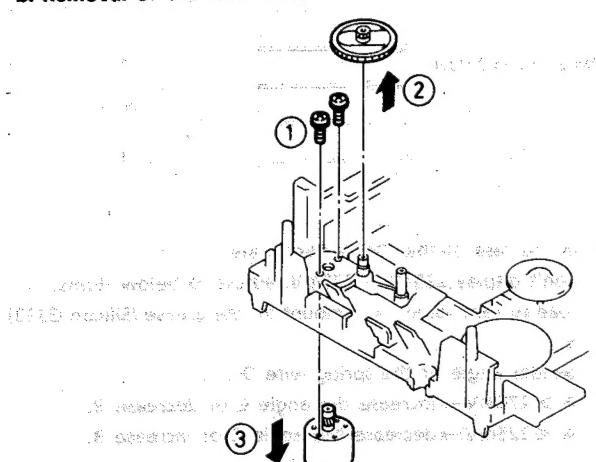
a. Removal of the disc chuck lever



c. Removal of the spindle motor



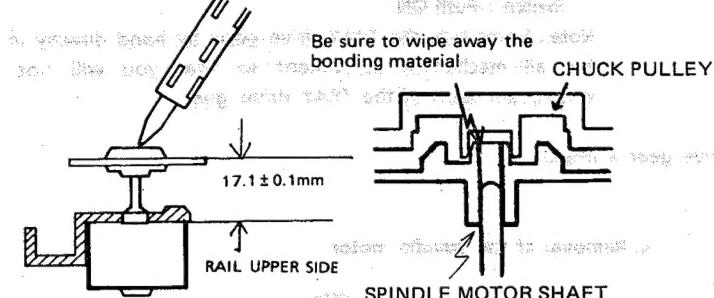
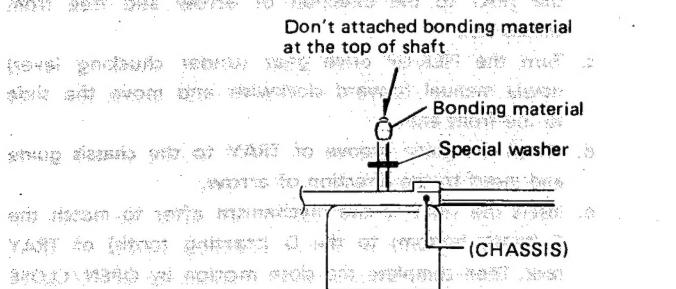
b. Removal of the sled motor



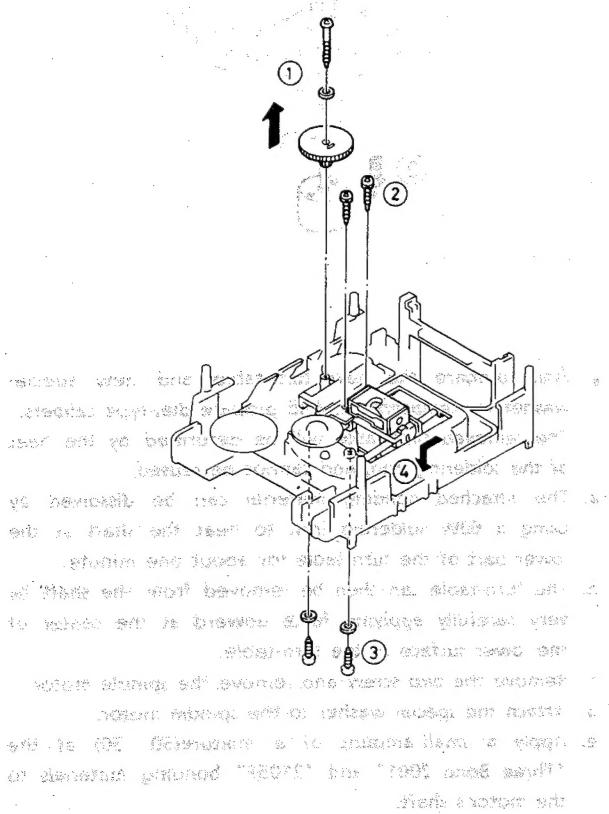
- First, prepare the new turn-table and new special washer for replacement. And prepare dial-type calipers. The removed turn-table will be deformed by the heat of the soldering iron, and cannot be reused.
- The attached bonding material can be dissolved by using a 60W soldering iron to heat the shaft at the lower part of the turn-table for about one minute.
- The turn-table can then be removed from the shaft by very carefully applying force upward at the center of the lower surface of the turn-table.
- Remove the two screw and remove the spindle motor.
- Attach the special washer to the spindle motor.
- Apply a small amount of a mixture(50 : 50) of the "Three Bond 2001" and "2105F" bonding materials to the motor's shaft.

DISASSEMBLY (CD MECHANISM)

- f. Install the turn-table as shown in the figure.
 g. Secure the turn-table by pressing gently. Be sure to wipe away (by using a piece of cloth, or similar material) any bonding material coming out of the hole.

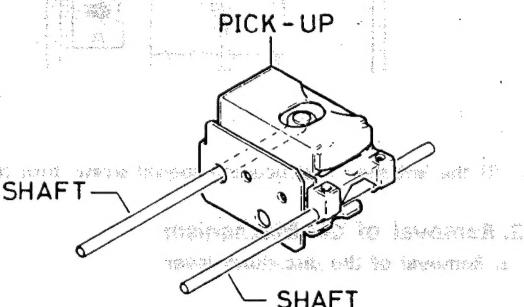


d. Removal of the Pick-up



e. Replacement and lubrication of the Pick-up

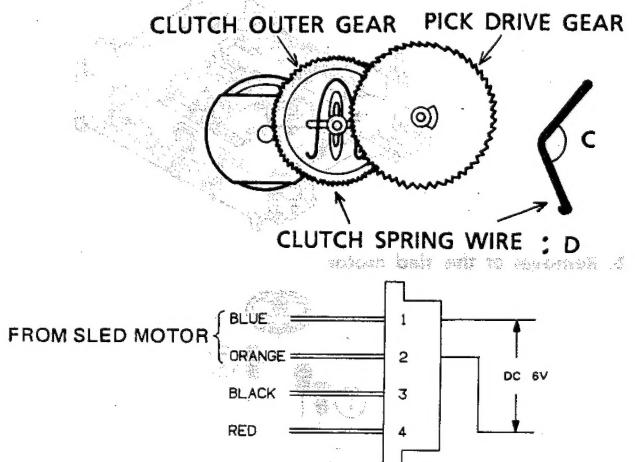
- Before replacement of the pick-up, be sure to carefully read the section regarding the pick-up when the unit is moved or transported.
- Remove the two pick-up rails with care fixing the 2 latches with any way driver from bottom of chassis.
- When replacing the pick-up, carefully wipe away the grease from the shafts on which the pick-up is mounted.
- Replace the pick-up.
- Move the pick-up to the position at the left side, and then apply a coating of floil (G-474B) to the shafts.
- Move the pick-up to the right side and apply floil to the remaining of the shafts.



f. Inspection of slip current

Stop the TRAY on opening by force, check the slip mechanism (next gear assembly of motor)

- Confirm that the inner gear stops and outer gear and motor's gear rotate.
- Confirm that the scale of control meter is 225mV ~ 275mV.
- Check this slip inspection on DC 6.0V.



- * In the case of that DC current scale don't display 225mV ~ 275mV, adjust to below items.
 read current value : A · amount of the grease (Silicon G333) : B
 bender angle of the spring wire D : C
 A > 275mV → increase the angle C or decrease B.
 A < 225mV → decrease the angle C or increase B.

CD ADJUSTMENT

Electrical Adjustment

So far we have presented explanations regarding compact disc player handling, notes prior to repair, handling the pick-up and disassembly of the unit. Be sure to carefully read these instructions before making any adjustments.

Test discs required for adjustments and checks

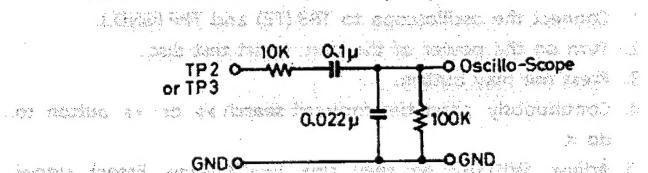
No.	Destination	Description (manufacturer)
1	414 245-2	for Demonstration (Polygram)

Preparations for Adjustments

Measuring instruments, tools and filter

- (1) Test disc : YEDS 17, -10dB, 1KHz (Sony)
- (2) Oscilloscope : SS5711 (10MHz or dual phenomenon) or Memoryscope : DSS6521 (Storagescope)
- (3) Digital voltmeter (Input impedance 1M ohm or more)

Note : Test disc are subject to change without notice.



BAND PASS FILTER

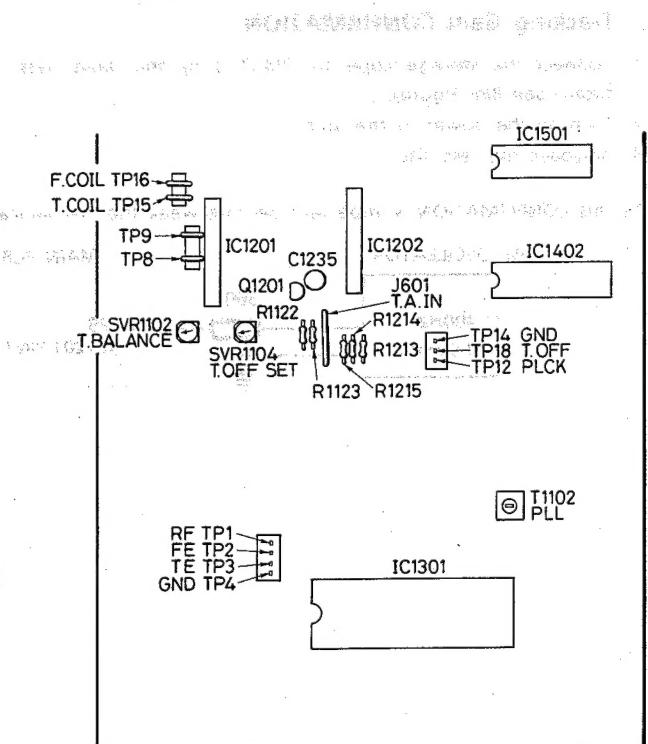
Notes : a. The adjustments can be using the equipment produced by other manufactures provided that the performance of that equipment corresponds to that of the above listed models.
b. Use a 10:1 probe for observing signals on the oscilloscope and storage scope.
c. Test disc is subject change without notice.

1. Initial set up

Set the initial position of adjustment controls as shown in figure below.

2. Free-run Frequency adjustment(PLL-VCO)

1. Connect the frequency counter to TP12(H), TP14(GND).
2. Turn on the power of the unit.
3. Adjust T1102 so that the frequency counter shows 4.30 ± 0.01MHz.
- if the adjustment is imperfect, get the long seek time, not read TOC, not sound. in the worst case become high speed turning, reverses turning and it may wound the disc.



3. Tracking Offset Adjustment (adjustment location : SVR1104)

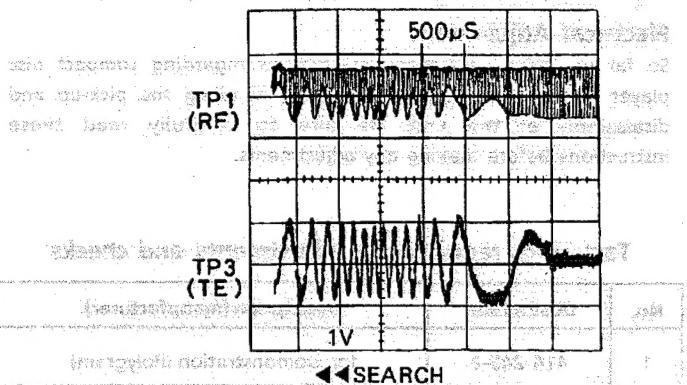
1. Connect the oscilloscope to TP15 (T.Coil), TP4 (GND), and shot TP18(T.Off),TP14(GND).
2. Turn on the power of the unit.
3. Adjust SVR1104 so that the DC voltage at TP15 is 60mV ± 20mV.
- If the adjustment is imperfect, become inferior playability can not playback the disc.

Note : Set the SVR's to the position as shown prior to the adjustment.

CD ADJUSTMENT

4. Tracking Balance Adjustment (SVR1102)

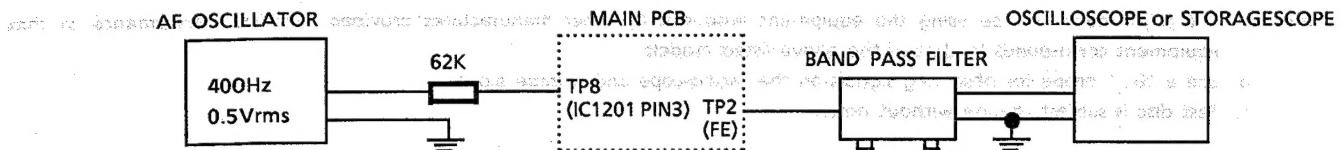
1. Connect the oscilloscope to TP3 (TE) and TP4 (GND).
 2. Turn on the power of the unit. Insert test disc.
 3. Press the play button.
 4. Continuously press the forward search \gg or \gg button to do it.
 5. Adjust SVR1102 so that the TE (Tracking Error) signal waveform of TP3 on the oscilloscope is vertically symmetrical relative to 0V. (See figure below)
- *If the adjustment is imperfect, become run away the spindle motor(pick-up sending motor), inferior playability.



5. FOCUS Gain CONFIRMATION

1. Connect the storage scope to TP2 (F.E) by the Band pass filter. (See BPF Figure)
2. Turn on the power of the unit.
3. play the test disc.

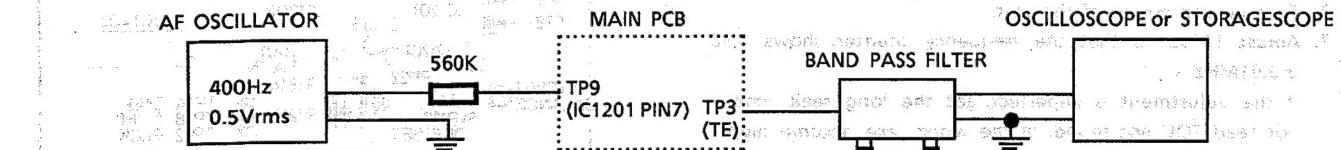
*If this CONFIRMATION is imperfect, become weak the mechanical shock, inferior playability, and can not playback the Disc.



6. Tracking Gain CONFIRMATION

1. Connect the storage scope to TP3 (T.E) by the Band pass filter. (See BPF Figure).
2. Turn on the power of the unit.
3. playback the test disc.

*If this CONFIRMATION is imperfect, become weak the mechanical shock, inferior playability, and can not playback the Disc.



4. Set the output of AF oscillator to 400Hz, 0.5V rms and connect to TP8 (IC1201 pin 3) by resistor 62k ohm.
5. Confirm so that the voltage of F.E signal waveform on the storage scope is 1V p-p, ± 3 db by through BPF.

4. Set the output of AF oscillator to 400Hz, 0.5V rms and connect to TP9 (IC1201 pin 7) by resistor 560k ohm.
5. Confirm so that the voltage of T.E signal waveform on the storagescope is 1V p-p, ± 3 db by through BPF.

MAIN PCB
AF OSCILLATOR
MAIN PCB
BAND PASS FILTER
OSCILLOSCOPE or STORAGESCOPE

MAIN PCB
AF OSCILLATOR
MAIN PCB
BAND PASS FILTER
OSCILLOSCOPE or STORAGESCOPE

TUNER ADJUSTMENT

- Use a plastic screwdriver for adjustment.
- Adjust the intermediate frequency of AM and FM to the frequency of ceramic filter.

RF Level : 75 ohm, Open SG voltage: dB μ V

(1) FM BAND

Antenna : 75 ohm Unbalanced-Direct Modulation : 1kHz, Dev. : $\pm 22.5\text{kHz}$ (mono/stereo), $\pm 6.75\text{kHz}$ (pilot)

VCO STEP	ITEMS	FREQUENCY INDICATED POSITION	INPUT CONDITIONS		OUTPUT CONDITIONS		ADJUST- ING PARTS	STANDARDS
			MEASURING INSTRUCTIONS	CONNECT- IONS	MEASURING INSTRUCTIONS	CONNECT- IONS		
1	IF	V-Curve 98.0 MHz	FM Sweep Generator (10.7MHz Non Modulation Small Input)	TP103(H) TP102(E)	FM Sweep Generator	V: TP203(H) S: TP204(H) TP205(E)	T201 T202	Max. Symmetrical Wave Max.
		S-Curve			Digital Voltmeter	TP401(H) TP102(E)	L104	$1.25 \pm 0.05\text{V}$
2	Tuning Cover	Low 87.5 MHz						
		High 108.0 MHz						Confirm voltage below: 8.5V
3	Tracking	Low 90.0 MHz	FM-SG(9dB)	FM ANT Terminal	VTVM	Tuner Out	L101 L102	
		High 106.0 MHz			Oscilloscope	(L / R & E)	CT101	Max.
4	IF S-Curve (0V)	98.0 MHz	FM-SG(66dB)	FM ANT Terminal	Digital Voltmeter	TP201(H) #TP202(E)	T202	$0 \pm 0.05\text{V}$
5	SD (Auto stop sensitivity)	98.0 MHz	FM-SG(26dB)	FM ANT Terminal	Digital Voltmeter	TP207(H) TP205(E)	SVR201	#SD Output low
6	### VCO (19 kHz)	98.0 MHz	FM-SG(66dB) (Non Modulation)	FM ANT Terminal	Frequency Counter	TP301(H) TP302(E)	SVR302	$19 \pm 0.05\text{kHz}$

#: TP202 is no earth point. Be careful so that digital voltmeter earth (including case) may not be in contact with other measuring equipments earth. (including case)

##: Rotate SVR201 to less than 4V. Adjust and confirm SG attenuator to be Hi (about 4V) at -1dB and low(below 1V) at +1 to +3dB.

###: Use IHF filter adjusted from 200~15000 Hz BPF. Set the Mode switch to STEREO position.

(2) MW BAND

Antenna : IRE Loop, Standard output : 100dB, Modulation : 1kHz 30%

STEP	ITEMS	FREQUENCY INDICATED POSITION	INPUT CONDITIONS		OUTPUT CONDITIONS		ADJUST- ING PARTS	STANDARDS
			MEASURING INSTRUCTIONS	CONNECT- IONS	MEASURING INSTRUCTIONS	CONNECT- IONS		
1	IF	999 kHz	AM Sweep Generator (459kHz Non Modulation)	TP151(H) TP152(E)	AM Sweep Generator	TP206(H) TP205(E)	X205	Max.
2	Tuning Cover	Low 522 kHz	AM-SG(78dB)	IRE Loop Ant.	Digital Voltmeter	TP401(H) TP102(E)	L151 CT151	$1.4 \pm 0.03\text{V}$
		High 1611 kHz						
3	Tracking	Low 603 kHz	AM-SG(78dB)	IRE Loop Ant.	VTVM	Tuner Out	L152	
		High 1404 kHz			Oscilloscope	(L / R & E)	CT152	Max.
4	SD (Auto stop sensitivity)	999 kHz	AM-SG(85dB)	IRE Loop Ant.	Digital Voltmeter	TP207(H) TP205(E)	SVR202	#SD Output low

#: Rotate SVR202 to less than 4V. Adjust and confirm SG attenuator to be Hi (about 4V) at -1dB and low(below 1V) at +1 to +3dB.

This must be after FM-SD adjustment. When rotating SVR201 after AM adjustment, make adjustment again.

TUNER ADJUSTMENT

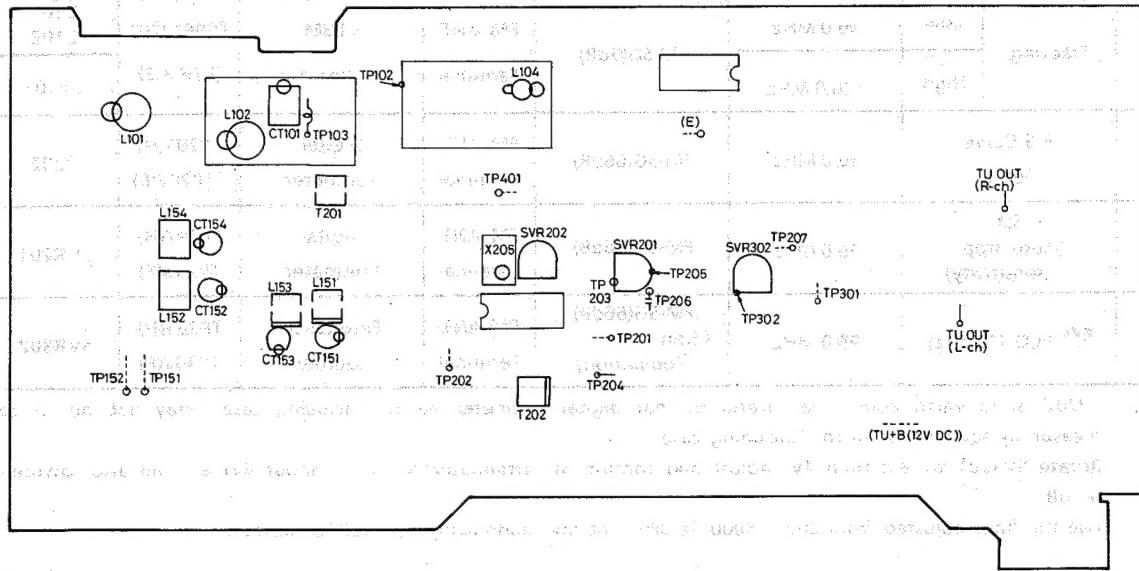
LW BAND

Antenna : IRE Loop, Standard modulation : 400Hz 30%

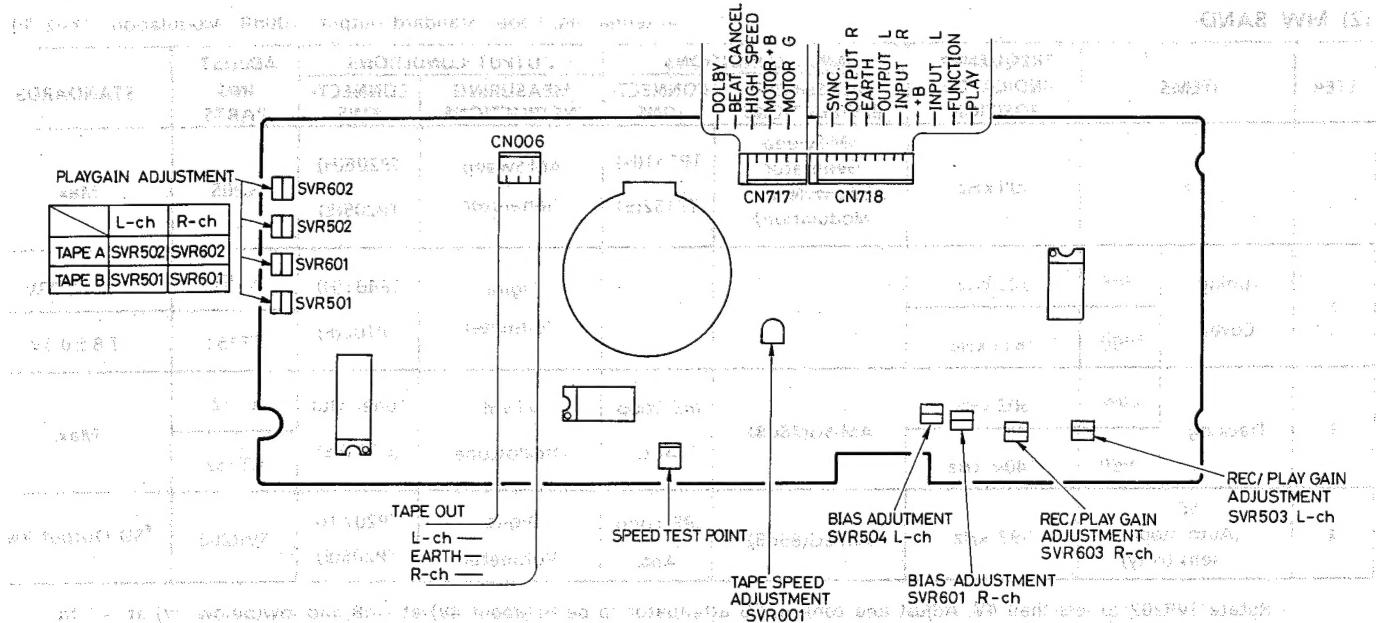
OPERATING ITEMS	FREQUENCY INDICATED POSITION	INPUT CONDITIONS		OUTPUT CONDITIONS		ADJUSTING PARTS	STANDARDS
		MEASURING INSTRUCTIONS	CONNECTIONS	MEASURING INSTRUCTIONS	CONNECTIONS		
Tuning Cover	Low	144 kHz	IRE Loop	Digital Voltmeter	TP401(H)	L153	$1.6 \pm 0.03V$
	High	290 kHz	AM-SG(85dB)	Voltmeter	TP102(E)	CT153	$7.0 \pm 0.05V$
Tracking	Low	162 kHz	IRE Loop	VTVM	Tuner Out	L154	Max.
	High	279 kHz	Ant.	Oscilloscope	(L/R & E)	CT154	

PARTS LOCATIONS

< TUNER >



< DECK >



ADJUSTMENT OF DECK & MECHANISM TORQUE

Amplifier Adjustment

	ITEM	DECK	TEST TAPE	INPUT	DOLBY SW	OUTPUT	ADJUST POINT	REMARKS
1	Head Azimuth	TAPE A TAPE B	VTT-738	-	OFF	TAPE OUT	Azimuth Screw	Adjust so as 10kHz output become maximum.
2	Playback Level	TAPE A	TCC-130	-	OFF	TAPE OUT	SVR502	Adjust so as TAPE OUT output become 0.54V.
		TAPE B					SVR602 SVR501 SVR601	
3	Rec / Play Level	TAPE B	AC-224	1kHz -13dB	OFF	TAPE OUT	SVR503 SVR603	Adjust SVR so as Monitor output = R/P Level = $0 \pm 1\text{dB}$.
4	Rec / Play Frequency	TAPE B	AC-224	1kHz/10kHz -20dB	ON	TAPE OUT	SVR504 SVR604	Adjust to obtain same output of 1kHz and 10kHz.

Input terminal : VIDEO IN

- Note. 1. Perform BIAS alignment by SVR504-604 so as No.3 satisfy spec of all item. Perform output alignment by SVR503-603.
 2. During alignment, measurement Beat cancel SW is at 1 condition fundamentally, cfm. R/P frequency characteristic, dolby effect also by 2 condition, when ship out set SW to 1 position.
 3. Fix to MAIN VR the position that SP output playing VTT722 is about 2.83V-10dB.(2.83V=1W output)

Tape Speed Adjustment

STEP	SPEED	DECK	TEST TAPE	SVR	TAPE COUNTER	REMARKS
1	Normal	TAPE A	MTT-111N etc. : 3000 Hz	SVR001	3000 ± 5Hz	Memorize the tape speed on counter.
2	High	TAPE A	TCW-211 etc. : 1500 Hz		3000 - 40 ~ +70Hz	

Connect the tape-speed(frequency) counter to TAPE-OUT on P.C.Board.

Confirm that the Tape speed of TAPE A is in 3000 - 40 ~ 70Hz by the TCW-211 test tape.

1. Set the test tape(MTT-111) to "TAPE A" deck. (play only mechanism)

2. Adjustment to obtain the tape speed counter at play of step 1.

Note: Set the test tape near the tape end.

High speed adjustment should be made after normal speed adjustment.

1. Set the Blank tape(C-60) to "TAPE B" deck. (record/play mechanism)

2. Set the test tape (TCW-211) to "TAPE A" deck.

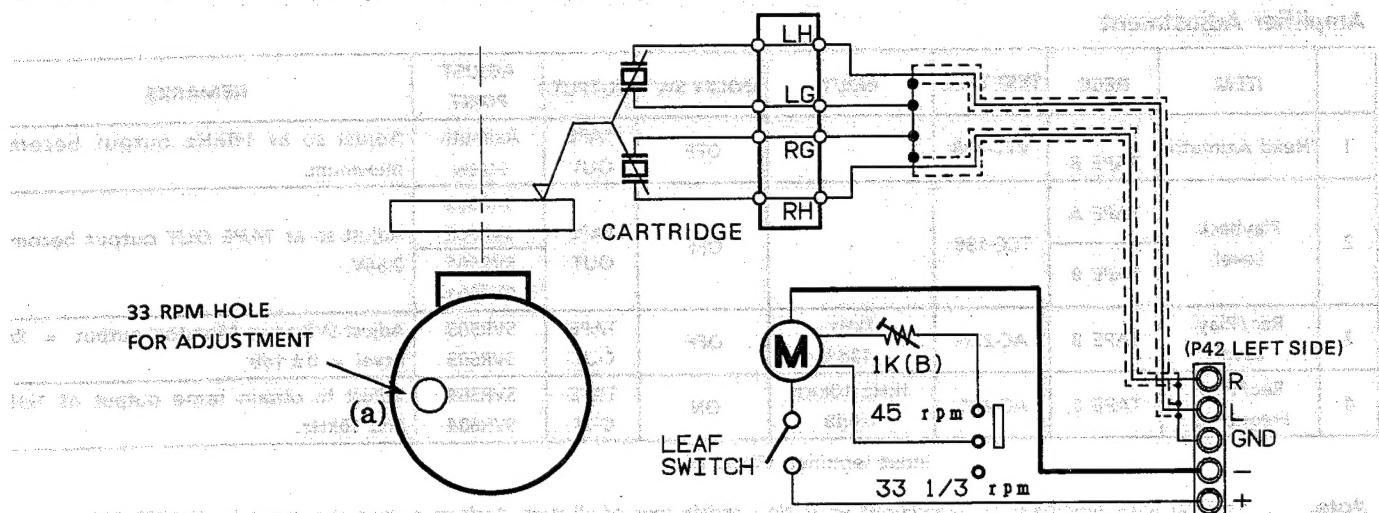
3. Set the Dubbing speed "HIGH".

4. Confirm the indication of the tape speed counter within 2 second after push the PLAY(TAPE A) and REC. (TAPE B) button.

Torque Measurements

ITEM	TAKE-UP TORQUE	BACK TENSION	TAPE TENSION
Test cassette	PLAY:TW211A F.FWD / REW:TW2231	PLAY:TW211A	Driving power cassette: TW-2412
PLAY	30 ~ 60gr.cm	2.0 ~ 4.5gr.cm	> 60g
F.FWD	55 ~ 120gr.cm	-	
REW	55 ~ 120gr.cm	-	

CHEMATIC DIAGRAM(TURN TABLE)



MOTOR : MMI-652RWA0

ADJUSTMENT PROCEDURES

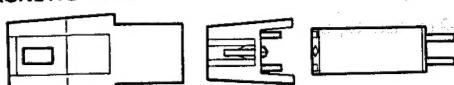
Speed adjustment

1. 45 rpm adjust SVR (in the PCB Assy : P23) $\leftarrow 45/33$ SW : 45
2. 33 1/3 rpm adjust SVR in the MOTOR through the hole(a) above Fig.

Replacement of cartridge

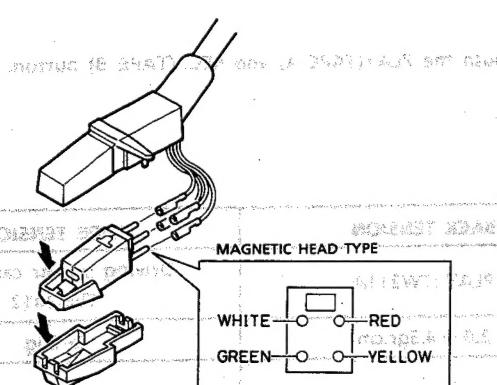
1. Use the + driver.
2. Remove lead wires connected to terminal strip with soldering iron. (R+), (R-), (L+), (L-)

MAGNETIC TYPE

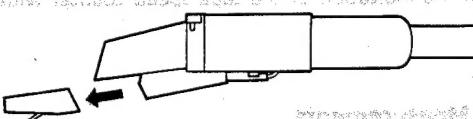


Replacement of stylus

The diamond stylus of the Turntable can normally play for about 300 to 500 hours. However, when sound becomes noisy, check the stylus for wear. If worn out, replace it. Pull the stylus out from the cartridge. Be careful not to touch the stylus tip when replacing the stylus. Hold Headshell by Finger, And Pull Out The Old Stylus.



MAGNETIC TYPE



DIAMOND STYLUS

ALUMINUM NEEDLE

SSW/TWEEZER

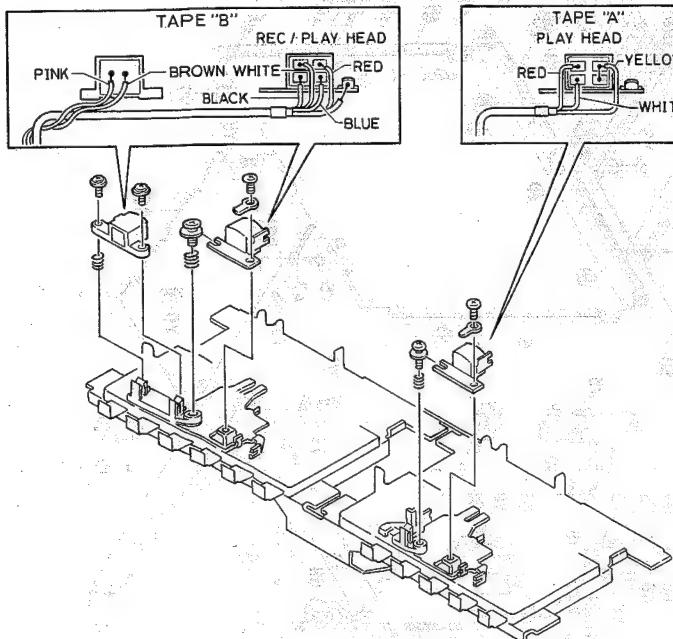
NO TIP - 22

NO STYLUS - 22

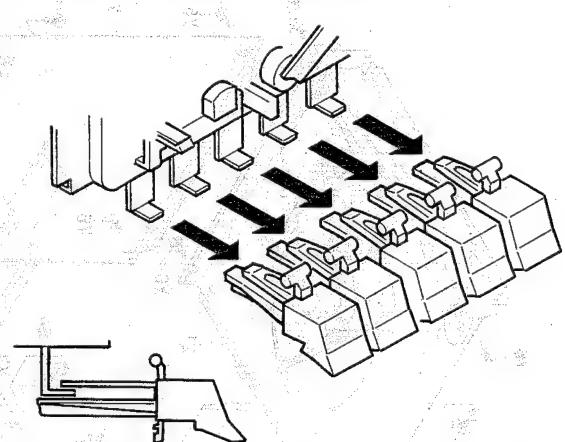
NO NEEDLE - 22

DISASSEMBLY (TAPE MECHANISM)

1. Replacement of Head



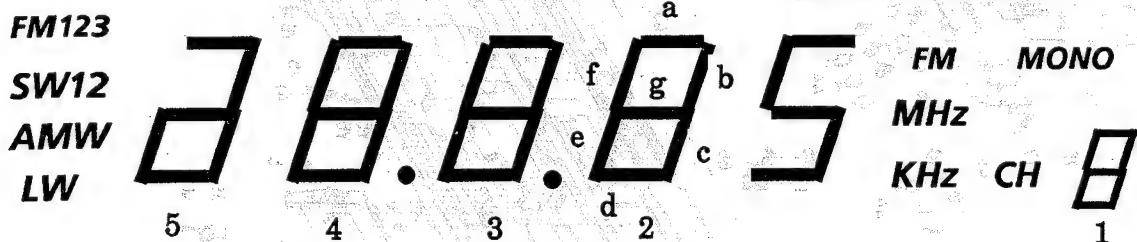
2. Assemble of mechanism button



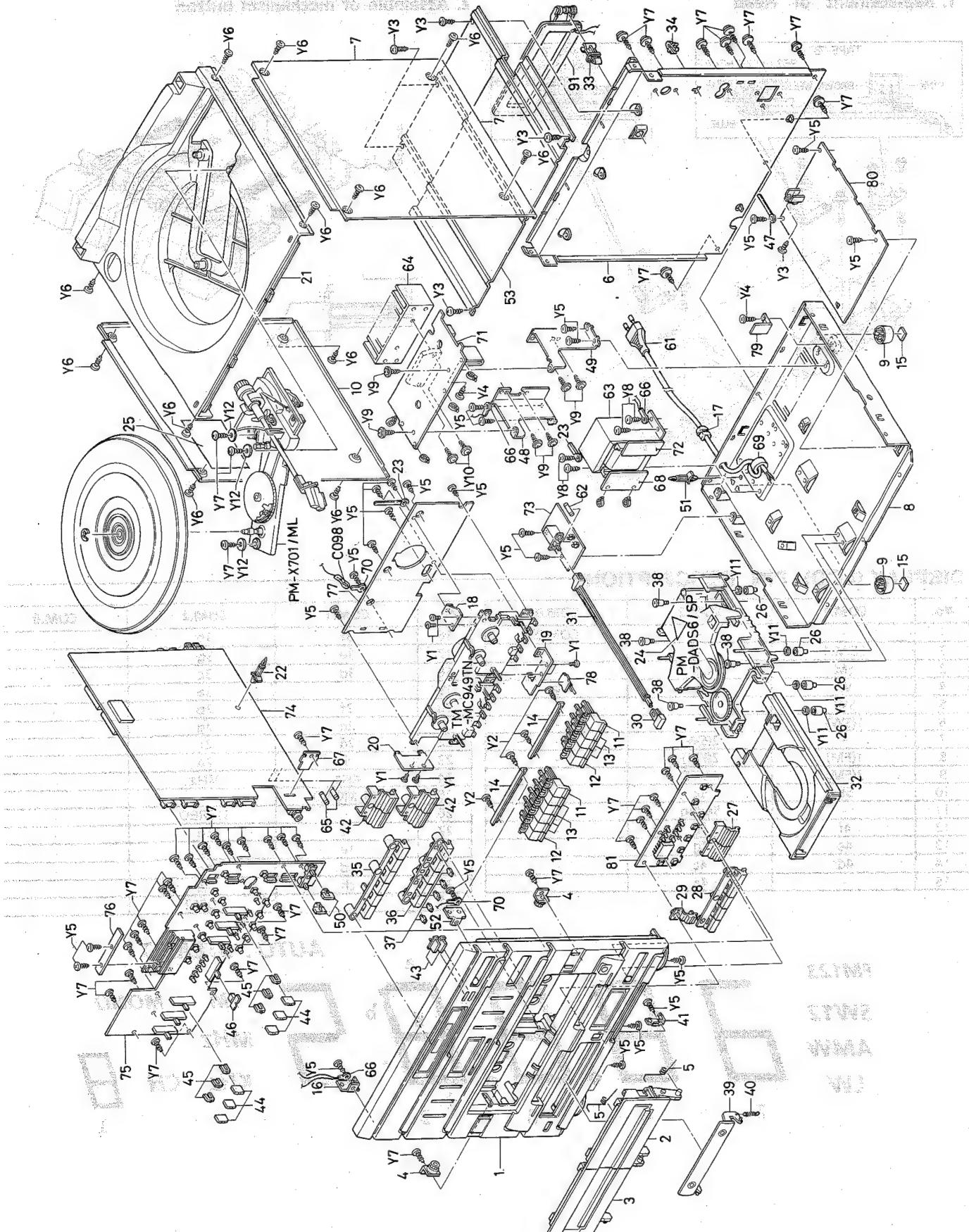
DISPLAY (LCD) PIN DESCRIPTION

No.	COM.1	COM.2	COM.0
1	-	-	COM.0
2	COM.1	-	-
3	FM	LW	-
4	W	A	M
5	SW	-	-
6	1(SW)	-	-
7	-	2(SW)	-
8	1(FM)	2(FM)	-
9	3(FM)	AUTO	-
10	5b	5c	-
11	-	5adeg	-
12	4f	4b	-
13	4e	4g	-
14	4d	4c	-
15	-	4a	-

No.	COM.1	COM.2	COM.0
16	3f	3b	-
17	3e	3g	-
18	3d	3c	-
19	-	3a	-
20	2f	2b	-
21	2e	2g	-
22	2d	2c	-
23	5	2a	-
24	KHz	MHz	-
25	FM MONO	-	-
26	-	STEREO	-
27	1f	1b	-
28	1e	1g	-
29	1d	1c	-
30	ch	1a	-
31	-	COM2	-



EXPLODED VIEW (CABINET & CHASSIS) —



PARTS LIST

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol  in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with , use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual.

Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

CAUTION: Regular type resistors and capacitors are not listed. To know those values, refer to the schematic diagram.

PACKING & ACCESSORIES

Ref. No.	Part No.	Description
	614 231 7624	INNER CARTON
	614 207 8181	PAD, TOP
	614 221 0659	PAD, BOTTOM
	614 231 6672	POLY COVER, SET
	614 176 2685	INNER POLYE COVER, INST-M.
	614 176 3712	INNER POLYE COVER,
		TURN TABLE SHEET
	614 180 4644	PROTECTOR SHEET, SET
	614 231 7679	INSTRUCTION MANUAL
	614 231 6832	LABEL, SAFETY, CLASS
	614 224 3497	LABEL, NEEDLE
	614 189 3778	CAUTION LABEL
	614 219 8223	ASSY, COVER, DUST, TURN TABLE
	614 106 8749	VINYL SASH, ARM REST
	614 231 5699	TAPE, 10X100, CARTRIDGE COVER
	614 112 3479	HINGE, L
	614 112 3486	HINGE, R
or	614 234 1056	ASSY, SHEET, TURNTABLE
	614 234 3692	ASSY, SHEET, TURNTABLE
	614 023 7344	ANT, FM

CABINET & CHASSIS

Ref. No.	Part No.	Description
1	614 230 0596	ASSY, PANEL, FRONT
2	614 221 6606	ASSY, LID, CASSETTE, TAPE A
3	614 230 0572	ASSY, LID, CASSETTE, TAPE B
4	614 069 0385	GEAR ASSY, DUMPER
5	614 218 0051	SPRING, WIRE, CASSETTE LID
6	614 231 9260	PANEL, REAR
7	614 230 5102	PANEL, SIDE, R
8	614 224 4166	CABINET, BOTTOM
9	614 207 2387	FOOT, REAR
10	614 230 5119	PANEL, SIDE, L
11	614 230 5126	KNOB, LEVER, PAUSE
12	614 230 5133	KNOB, LEVER, REC.PLAY(TAPE A)
13	614 230 5140	KNOB, LEVER, REW-F.FWD·STOP/EJECT·PLAY(TAPE B)
14	614 194 9239	BRACKET, MECHANISM BUTTON
15	614 106 4215	STAND, REAR
16	614 221 1373	BRACKET-M, FRONT.(L)
17	614 129 1901	FIXER, AC CORD
18	614 216 9247	BRACKET-E, MECHA. PCB
19	614 216 9254	BRACKET-E, MECHA. PCB
20	614 216 9230	BRACKET-E, MECHA. PCB
21	614 229 2372	PANEL, TOP
22	614 129 5534	FIXER, TUNER PCB
23	614 130 0382	LUG, CD PCB
24	614 224 3695	LABEL, SAFETY, LASER BEAM
25	614 191 3698	CAUTION LABEL, LASER BEAM
26	614 195 6978	RUBBER CUSHION, CD FLOATING
27	614 220 6836	BUTTON, CD PLAY/PAUSE·STOP
28	614 230 5157	BUTTON, CD FUNCTION
29	614 220 6850	BUTTON, CD EJECT
30	614 220 6874	BUTTON, POWER
31	614 112 7231	JOINT, POWER
32	614 221 1410	TABLE, LOADING, CD TRAY
33	614 108 0307	BRACKET, LOOP ANT
34	614 108 1076	BRACKET, ANT, LEAD
35	614 230 5171	BUTTON, TUNER PRESET

Ref. No.	Part No.	Description
36	614 230 5154	BUTTON, FUNCTION
37	614 221 0222	WINDOW, FUNCTION, LED
38	412 004 5705	SPECIAL SCREW, CD
39	614 230 0671	DOOR, CD FRONT
40	614 221 0246	SPRING, TENS, CD DOOR
41	614 220 6928	BRACKET-M, CD DOOR
42	614 220 6829	BUTTON, TUNING·VOLUME
43	614 220 6843	BUTTON, TUNER BAND·TUNING/FM
44	614 220 6737	KNOB, SLIDE, G.EQ
45	614 220 6690	WINDOW, G.EQ, LED
46	614 220 6744	KNOB, SLIDE, BALANCE
47	614 129 9136	LUG, DECK PCB
48	614 208 9262	BRACKET-E, HEAT SINK, L
49	614 208 9279	BRACKET-E, HEAT SINK, R
50	614 220 6881	BUTTON, DOLBY·DUB. SPEED
51	614 129 5527	FIXER, BOTTOM
or	614 129 2496	FIXER, LEAD
	614 129 4971	FIXER, LEAD
52	614 221 1816	CUSHION 10X40, MOTOR LEAD
53	614 222 1266	BRACKET-M, FRONT(R)
		SHIELD, TU

FIXING PARTS

Ref. No.	Part No.	Description
Y1	411 022 7500	SCR S-TPG PAN 2X4
Y2	411 021 3107	SCR S-TPG BIN 2.6X8
Y3	411 001 1901	SCR S-TPG BIN 3X6
Y4	411 027 3101	SCR S-TPG BIN 3X8
Y5	411 021 640511	SCR S-TPG BIN 3X8
Y6	411 021 660334	SCR S-TPG BIN 3X8
Y7	411 021 350350	SCR S-TPG BIN 3X10
Y8	411 001 420972	SCR S-TPG BIN 4X8
Y9	411 020 8905	SCR S-TPG BRZ + FLG 3X10
Y10	411 020 9506	SCR S-TPG BRZ + FLG 3X16
Y11	411 087 8108	WASHER V 3X8X0.5
Y12	411 092 3303	WASHER Z 3X12X1

ELECTRICAL PARTS

Ref. No.	Part No.	Description
61	△ 614 023 3100	POWER CORD, AC
or	△ 614 023 3418	POWER CORD, AC
or	△ 614 203 0493	POWER CORD, AC
62	△ 423 016 9605	FUSE 250V 0.4A, F901
63	△ 614 229 8206	POWER TRANS
64	△ 614 221 949093	HEAT SINK
65	△ 423 017 0106	FUSE 250V 1.6A, F701·801
66	614 051 9808	LUG, CD GND
67	614 231 6481	PCB, HP STOPPER
68	△ 614 230 7717	PCB, P.T PRIMARY
	614 218 6459	ASSY, CONNECTOR-S, 3P W/LEAD,
	614 218 6442	ASSY, CONNECTOR-S,
69	11-0403-135 580143	6P W/LEAD, MECHA.
or	614 210 1308	ELECT.0.1U M 50V, C010
70	614 129 9037	CORE
71	614 051 9785	CORE
91	614 214 5180	LOOP ANT ASSY
C098	403 001 1906	CERAMIC 0.01U M

PARTS LIST

MAIN AMPLIFIER P.C.BOARD ASSY

Ref. No.	Part No.	Description
'1	614 232 8057	ASSY, PCB, MAIN AMP
	614 203 7362	HEAT SINK, FOR IC903
	614 224 3527	ASSY, CONNECTOR-S, 3P, SP OUT (CN913)
CN911	614 020 6555	SOCKET, 3P, IC REG
CN912	614 216 5249	SOCKET, 10P (B TO B) TUN & PRE
CN913	614 020 1222	SOCKET, 3P, SP OUT
CN914	614 020 1246	SOCKET, 5P, P.T SEC
C710	△ 409 101 8302	IC STK4112MK2
C903	△ 409 168 2107	IC UPC7812HF
or	△ 409 001 7603	IC AN7812F
2901	405 015 1606	TR 2SC2655-Y
2902	405 001 9302	TR 2SA1020-Y
2903	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
	405 020 7204	TR 2SC945A-K
2901	△ 407 107 6001	DIODE RL203-BD80
2902	△ 407 107 6001	DIODE RL203-BD80
2903	△ 407 107 6001	DIODE RL203-BD80
2904	△ 407 107 6001	DIODE RL203-BD80
2905	407 004 9105	DIODE DSF10C
2906	407 004 9105	DIODE DSF10C
2907	407 004 9105	DIODE DSF10C
2908	407 004 9105	DIODE DSF10C
2909	△ 407 053 3208	ZENER DIODE MTZ12B
2910	△ 407 053 3208	ZENER DIODE MTZ12B
2911	407 007 9904	DIODE GMA01
or	407 012 4406	DIODE 1SS133
2912	407 007 9904	DIODE GMA01
or	407 012 4406	DIODE 1SS133
C901	403 057 3800	POLYESTER 0.1U M 50V
C902	403 057 3800	POLYESTER 0.1U M 50V
C903	403 057 3800	POLYESTER 0.1U M 50V
C904	403 053 4405	ELECT 2200U M 35V
C905	403 053 4405	ELECT 2200U M 35V
C906	403 053 4405	ELECT 2200U M 35V
R757	401 008 7204	CARBON 2.2K JB 1/2W, FLAME PROOF
R857	401 008 7204	CARBON 2.2K JB 1/2W, FLAME PROOF
R901	△ 402 044 6701	RESISTOR 0.47 J- 1/2W
R902	△ 402 004 4303	FUSIBLE RES 10 J- 1/4W
R903	△ 402 004 4303	FUSIBLE RES 10 J- 1/4W
R914	△ 402 023 1703	FUSIBLE RES 100 J- 1/4W
R915	△ 402 023 1703	FUSIBLE RES 100 J- 1/4W

TUNER & PRE-AMPLIFIER P.C.BOARD ASSY

Ref. No.	Part No.	Description
74	614 232 8125	ASSY, PCB, TUN & PRE-AMP
	614 208 4540	FUSE HOLDER, FOR F701+801
	614 116 5349	SHIELD PLATE, PARTS SIDE, FM-RF
	614 117 1029	SHIELD PLATE, SOLDER SIDE, FM-RF
	614 210 4675	FILTER, 459KHZ (X204+205 PAIR)
	614 218 2840	TERMINAL, FM ANT (JK1)
	614 035 2702	SOCKET, VIDEO (CN706)
	614 218 0068	TERMINAL, 4P, SPEAKER
	614 035 1712	SOCKET, W/SWITCH, HEADPHONES (CN714)
	614 223 0756	ASSY, CONNECTOR-S, 5P W/LEAD, PHONO (CN704)
	614 226 4089	SHIELD
CT101	614 007 3683	TRIMMER, 8PF (BK)
CT151	614 007 6356	TRIMMER, 11PF (WH)
CT152	614 007 6356	TRIMMER, 11PF (WH)
CT153	614 007 6332	TRIMMER, 30PF (GR)
CT154	614 007 6332	TRIMMER, 30PF (GR)
T101	614 028 6922	FILTER
T201	614 030 3476	I.F.T, 10.7MHZ, FM
T202	614 030 4114	I.F.T, 10.7MHZ, FM
T204	614 029 3906	MX COIL
T301	614 027 7485	CHOCK
T302	614 027 7485	CHOCK
L101	614 034 9870	VHF COIL, FM
L102	614 034 9887	VHF COIL, FM
L103	614 028 4058	FILTER, FM
L104	614 035 0036	VHF COIL, FM
L105	614 034 8286	VHF COIL
L121	614 034 7135	VHF COIL
L122	614 034 7135	VHF COIL
L151	614 033 8904	O.S.C COIL, MW
L152	614 197 4002	ANT COIL, MW
L153	614 034 1003	O.S.C COIL, LW
L154	614 197 3975	ANT COIL, LW
L155	614 028 4379	FILTER, 1MH, AM
X201	614 030 5128	I.F FILTER, FM
X202	614 030 5128	I.F FILTER, FM
X203	614 030 5128	I.F FILTER
X204	614 030 7443	I.F FILTER, 459KHZ, AM
X205	614 211 2939	FILTER, 459KHZ, AM
SVR201	614 003 3267	SEMI-FIXED VR, 20K OHM (B)
or	614 006 9693	SEMI-FIXED VR, 20K OHM (B)
SVR202	614 003 3250	SEMI-FIXED VR, 10K OHM (B)
or	614 006 9686	SEMI-FIXED VR, 10K OHM (B)
SVR302	614 003 3250	SEMI-FIXED VR, 10K OHM (B)
or	614 006 9686	SEMI-FIXED VR, 10K OHM (B)
CN701	614 035 4935	SOCKET, 4P, CD
CN702	614 017 2102	PLUG, 3P, CD
CN703	614 020 6623	SOCKET, 10P, DECK
CN704	614 020 1246	SOCKET, 5P, PHONO
CN707	614 216 5157	PLUG, 10P, MAIN AMP
CN716	614 017 1440	PLUG, 3P, MAIN AMP
CN717	614 208 2348	SOCKET, 7P (B TO B), FRONT 3
CN718	614 208 2379	SOCKET, 10P (B TO B), FRONT 1
CN719	614 208 2331	SOCKET, 6P (B TO B), FRONT 2
CN720	614 208 2355	SOCKET, 8P (B TO B), FRONT 4
IC201	409 016 2204	IC LA1265S
IC301	409 016 9500	IC LA3361
IC402	409 154 0209	IC TC9172AP
IC701	409 018 4909	IC LA6458S
IC702	409 022 3608	IC LC7818
IC705	409 053 0409	IC TC9153AP
IC706	409 018 4305	IC LA6458D
IC711	409 018 4909	IC LA6458S
Q101	405 092 5702	TR 2SK606-Q
Q102	405 012 5904	TR 2SC1923-Y
Q103	405 012 5904	TR 2SC1923-Y
Q104	405 012 5904	TR 2SC1923-Y
Q105	405 092 5702	TR 2SK606-Q
Q151	405 016 2206	TR 2SK83-R2
or	405 016 2305	TR 2SC2878-B
Q152	405 016 2206	TR 2SC2878-A

POWER SWITCH P.C.BOARD ASSY

Ref. No.	Part No.	Description
73	614 232 8095	ASSY, PCB, POWER SW
	△ 614 017 8203	TERMINAL BOARD, AC-IN
	△ 614 208 4540	FUSE HOLDER
	△ 614 086 2164	COVER, FOR C999
S901	△ 614 018 8967	SWITCH, POWER
C999	△ 404 000 1607	CERAMIC 0.01U F 400V
or	△ 404 033 3401	CERAMIC 0.01U Z

PARTS LIST

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
or	405 016 2305	TR 2SC2878-B	D352	407 053 8807	ZENER DIODE MTZ9.1B
Q153	405 016 2206	TR 2SC2878-A	D401	407 012 5809	DIODE 1SS176
or	405 016 2305	TR 2SC2878-B	or	407 007 9904	DIODE GMA01
Q154	405 016 2206	TR 2SC2878-A	or	407 012 4406	DIODE 1SS133
Q154	405 016 2305	TR 2SC2878-B	D430	407 053 6704	ZENER DIODE MTZ5.6B
Q155	405 016 2206	TR 2SC2878-A	D913	407 007 9904	DIODE GMA01
or	405 016 2305	TR 2SC2878-B	or	407 012 4406	DIODE 1SS133
Q157	405 012 2002	TR 2SC1815-GR	D914	407 007 9904	DIODE GMA01
or	405 020 7204	TR 2SC945A-K	D914	407 012 4406	DIODE 1SS133
Q158	405 078 5405	TR 2SK301-R	D915	407 007 9904	DIODE GMA01
Q201	405 018 7902	TR 2SC380TM-0	D916	407 012 4406	DIODE 1SS133
Q202	405 012 2002	TR 2SC1815-GR	D916	407 007 9904	DIODE GMA01
or	405 020 7204	TR 2SC945A-K	D917	407 012 4406	DIODE 1SS133
Q301	405 012 2002	TR 2SC1815-GR	D917	407 007 9904	DIODE GMA01
Q302	405 012 2002	TR 2SC1815-GR	D918	407 007 9904	DIODE GMA01
Q303	405 016 2206	TR 2SC2878-A	or	407 012 4406	DIODE 1SS133
or	405 016 2305	TR 2SC2878-B	D919	407 007 9904	DIODE GMA01
Q304	405 016 2206	TR 2SC2878-A	or	407 012 4406	DIODE 1SS133
or	405 016 2305	TR 2SC2878-B	D920	407 007 9904	DIODE GMA01
Q351	405 001 7001	TR 2SA1015-GR	D920	407 012 4406	DIODE 1SS133
Q352	405 012 2002	TR 2SC1815-GR	D921	407 007 9904	DIODE GMA01
or	405 020 7204	TR 2SC945A-K	D921	407 012 4406	DIODE 1SS133
Q354	405 012 2002	TR 2SC1815-GR	D922	407 007 9904	DIODE GMA01
or	405 020 7204	TR 2SC945A-K	D922	407 012 4406	DIODE 1SS133
Q355	405 001 7001	TR 2SA1015-GR	D923	407 053 7107	ZENER DIODE MTZ6.2B
Q357	405 012 2002	TR 2SC1815-GR	D924	407 007 9904	DIODE GMA01
or	405 020 7204	TR 2SC945A-K	D924	407 012 4406	DIODE 1SS133
Q358	405 001 7001	TR 2SA1015-GR	D925	407 007 9904	DIODE GMA01
Q361	405 001 7001	TR 2SA1015-GR	D925	407 012 4406	DIODE 1SS133
Q370	405 001 7001	TR 2SA1015-GR	D926	407 007 9904	DIODE GMA01
Q371	405 012 2002	TR 2SC1815-GR	D926	407 012 4406	DIODE 1SS133
or	405 020 7204	TR 2SC945A-K	D927	407 007 9904	DIODE GMA01
Q372	405 001 7001	TR 2SA1015-GR	D927	407 012 4406	DIODE 1SS133
Q402	405 078 4903	TR 2SC2634-R	D950	407 007 9904	DIODE GMA01
Q403	405 078 4903	TR 2SC2634-R	D950	407 012 4406	DIODE 1SS133
Q704	405 011 8609	TR 2SC1740S-S	C051	403 062 5103	POLYESTER 5600P K 50V
or	405 012 2002	TR 2SC1815-GR	C052	403 062 5103	POLYESTER 5600P K 50V
or	405 020 7204	TR 2SC945A-K	C053	403 062 5103	POLYESTER 5600P K 50V
Q705	405 011 8609	TR 2SC1740S-S	C054	403 062 5103	POLYESTER 5600P K 50V
or	405 012 2002	TR 2SC1815-GR	C154	403 082 2205	POLYPRO 560P J 100V
or	405 020 7204	TR 2SC945A-K	C155	403 082 2007	POLYPRO 510P J 100V
Q804	405 011 8609	TR 2SC1740S-S	C157	403 033 3206	CERAMIC 82P J 50V
or	405 012 2002	TR 2SC1815-GR	C306	403 080 5000	POLYPRO 1000P J 100V
or	405 020 7204	TR 2SC945A-K	C407	403 106 1603	NP-ELECT 1U-Q 50V
Q805	405 011 8609	TR 2SC1740S-S	C734	403 057 3800	POLYESTER 0.1U M 50V
or	405 012 2002	TR 2SC1815-GR	C735	403 057 3800	POLYESTER 0.1U M 50V
or	405 020 7204	TR 2SC945A-K	C834	403 057 3800	POLYESTER 0.1U M 50V
Q904	405 011 8609	TR 2SC1740S-S	C835	403 057 3800	POLYESTER 0.1U M 50V
or	405 012 2002	TR 2SC1815-GR	C934	403 040 0403	ELECT 1000U M 10V
or	405 020 7204	TR 2SC945A-K	R380	△ 401 018 1209	CARBON 33JB 1/4W,
Q905	405 011 8609	TR 2SC1740S-S	R743	△ 401 010 5601	FLAME PROOF
or	405 012 2002	TR 2SC1815-GR	R744	△ 401 009 5506	CARBON 5.6 JB 1/2W,
or	405 020 7204	TR 2SC945A-K	R843	△ 401 010 5601	FLAME PROOF
Q906	405 001 7001	TR 2SA1015-GR	R844	△ 401 009 5506	CARBON 33JB 1/2W,
D101	407 105 0100	VARACTOR DI SVC211-B-AL			FLAME PROOF
D102	407 105 0100	VARACTOR DI SVC211-B-AL			
D103	407 105 0100	VARACTOR DI SVC211-B-AL			
D104	407 012 5809	DIODE ISS176			
or	407 007 9904	DIODE GMA01			
or	407 012 4406	DIODE ISS133			
D151	407 091 5004	VARACTOR DI SVC321SPA-C-2			
D152	407 091 5004	VARACTOR DI SVC321SPA-C-2			
D201	407 012 5809	DIODE ISS176			
or	407 007 9904	DIODE GMA01			
or	407 012 4406	DIODE ISS133			
D301	407 012 5809	DIODE ISS176			
or	407 007 9904	DIODE GMA01			
or	407 012 4406	DIODE ISS133			
D302	407 005 4505	DIODE DS442X			
or	407 013 1701	DIODE 1S1588			
or	407 013 7109	DIODE 1S2473			
D351	407 012 5809	DIODE ISS176			
or	407 007 9904	DIODE GMA01			
or	407 012 4406	DIODE 1SS133			

FRONT P.C.BOARD ASSY

Ref. No.	Part No.	Description
75	614 232 8149	ASSY, PCB, FRONT
	614 216 9285	MOUNT-E, LCD
	614 220 3651	SHEET, LCD
	614 112 2328	DOUBLE FACE, 3X60, LCD
	614 221 2431	SWITCH, PUSH, DOLBY
or	614 107 0971	DUB SPEED
A401	614 217 2612	TAPE, 9X100, LCD
X401	614 008 0063	LCD (LIQUID CRYSTAL DISPLAY)
		CRYSTAL, 7.2MHZ

PARTS LIST

Ref. No.	Part No.	Description
S401	614 204 0317	CRYSTAL, 7.2MHZ
S402	614 220 5655	SWITCH, TACT, TUNING +
S403	614 220 5655	SWITCH, TACT, TUNING -
S404	614 220 5655	SWITCH, TACT, BAND
S405	614 220 5655	SWITCH, TACT, FM MODE
S406	614 220 5655	SWITCH, TACT, PRESET (P1)
S407	614 220 5655	SWITCH, TACT, PRESET (P2)
S408	614 220 5655	SWITCH, TACT, PRESET (P3)
S409	614 220 5655	SWITCH, TACT, PRESET (P4)
S410	614 220 5655	SWITCH, TACT, PRESET (P5)
S411	614 220 5655	SWITCH, TACT, PRESET (P6)
S902	614 220 5655	SWITCH, TACT, PHONO
S903	614 220 5655	SWITCH, TACT, VIDEO
S904	614 220 5655	SWITCH, TACT, TUNER
S905	614 220 5655	SWITCH, TACT, TAPE
S906	614 220 5655	SWITCH, TACT, CD
S907	614 220 5655	SWITCH, TACT, VOLUME +
S908	614 220 5655	SWITCH, TACT, VOLUME -
VR701	614 221 4756	VR, SLIDE, G.EQ, LEFT (100HZ)
VR703	614 221 4756	VR, SLIDE, G.EQ, LEFT (1KHZ)
VR705	614 221 4756	VR, SLIDE, G.EQ, LEFT (12KHZ)
VR706	614 003 5766	V.R, BALANCE (VR706-806)
VR801	614 221 4756	VR, SLIDE, G.EQ, RIGHT (100HZ)
VR803	614 221 4756	VR, SLIDE, G.EQ, RIGHT (1KHZ)
VR805	614 221 4756	VR, SLIDE, G.EQ, RIGHT (12KHZ)
CN401	614 035 4911	SOCKET, 2P, LCD LAMP (CN907)
CN901	614 208 2249	PLUG, 6P (B TO B), TUN & PRE 2
CN902	614 208 2263	PLUG, 8P (B TO B), TUN & PRE 4
CN903	614 208 2256	PLUG, 7P (B TO B), TUN & PRE 3
CN904	614 208 2287	PLUG, 10P (B TO B), TUN & PRE 1
CN909	614 020 6586	SOCKET, 6P, DECK
IC401	410 064 8407	IC TC9306F-045 BS
IC707	409 020 2900	IC LB1433N
Q703	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 020 7204	TR 2SC945A-K
Q803	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 020 7204	TR 2SC945A-K
Q907	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 020 7204	TR 2SC945A-K
Q908	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 020 7204	TR 2SC945A-K
D402	407 012 5809	DIODE 1SS176
or	407 007 9904	DIODE GMA01
or	407 012 4406	DIODE 1SS133
D403	407 012 5809	DIODE 1SS176
or	407 007 9904	DIODE GMA01
or	407 012 4406	DIODE 1SS133
D405	407 012 5809	DIODE 1SS176
or	407 007 9904	DIODE GMA01
or	407 012 4406	DIODE 1SS133
D406	407 012 5809	DIODE 1SS176
or	407 007 9904	DIODE GMA01
or	407 012 4406	DIODE 1SS133
D407	407 012 5809	DIODE 1SS176
or	407 007 9904	DIODE GMA01
or	407 012 4406	DIODE 1SS133
D408	407 005 4505	DIODE DS442X
or	407 013 1701	DIODE 1S1588
or	407 013 7109	DIODE 1S2473
D409	407 005 4505	DIODE DS442X
or	407 013 1701	DIODE 1S1588
or	407 013 7109	DIODE 1S2473
D410	407 005 4505	DIODE DS442X
or	407 013 1701	DIODE 1S1588
or	407 013 7109	DIODE 1S2473
D411	407 005 4505	DIODE DS442X
or	407 013 1701	DIODE 1S1588
or	407 013 7109	DIODE 1S2473
D928	407 007 9904	DIODE GMA01
or	407 012 4406	DIODE 1SS133

Ref. No.	Part No.	Description
D929	407 007 9904	DIODE GMA01
or	407 012 4406	DIODE 1SS133
D933	408 008 9108	LED SLR-56VC70F130-N
D934	408 008 9108	LED SLR-56VC70F130-N
D935	408 008 9108	LED SLR-56VC70F130-N
D936	408 008 9108	LED SLR-56VC70F130-N
D937	408 008 9108	LED SLR-56VC70F130-N
D938	408 008 9108	LED SLR-56VC70F130-N
D939	408 008 9108	LED SLR-56VC70F130-N
D940	408 008 9108	LED SLR-56VC70F130-N
D941	408 008 9108	LED SLR-56VC70F130-N
D942	408 008 9108	LED SLR-56VC70F130-N
C401	403 019 0403	CERAMIC 24P J 50V
C402	403 019 0403	CERAMIC 24P J 50V
C410	403 196 9602	DL-ELECT 0.047F Z 5.5V

LCD LAMP (LED) P.C.BORD ASSY

Ref. No.	Part No.	Description
76	614 232 8163	ASSY, PCB, LAMP
CN402	614 035 4911	SOCKET, 2P, FRONT
D441	407 129 1107	LED SLP-880A-51
D442	407 129 1107	LED SLP-880A-51
D443	407 129 1107	LED SLP-880A-51

DECK AMPLIFIER P.C.BORD ASSY

Ref. No.	Part No.	Description
77	614 221 1700	ASSY, PCB, DECK AMP
	614 130 6926	TUBE, 20X2, FOR R981
L501	614 029 3807	MX COIL
L502	614 027 8545	CHOKE COIL
or	614 210 3685	INDUCTOR, FERITE
L511	614 202 8865	FILTER
L512	614 029 3142	MX COIL
L601	614 029 3807	MX COIL
L602	614 027 8545	CHOKE COIL
or	614 210 3685	INDUCTOR, FERITE
L611	614 202 8865	FILTER
L612	614 029 3142	MX COIL
981	614 212 0804	TRANS, OSC
SVR1	614 204 1871	SEMI-FIXED VR, 20K OHM (B)
SVR501	614 003 6183	SEMI-FIXED VR, 10K OHM (B)
SVR502	614 003 6183	SEMI-FIXED VR, 10K OHM (B)
SVR503	614 003 6183	SEMI-FIXED VR, 10K OHM (B)
SVR504	614 003 6237	SEMI-FIXED VR, 200K OHM (B)
SVR601	614 003 6183	SEMI-FIXED VR, 10K OHM (B)
SVR602	614 003 6183	SEMI-FIXED VR, 10K OHM (B)
SVR603	614 003 6183	SEMI-FIXED VR, 10K OHM (B)
SVR604	614 003 6237	SEMI-FIXED VR, 200K OHM (B)
CN1	614 017 2102	PLUG, 3P
CN2	614 017 2133	AUTO TEPE SELECTOR SW
CN5	614 016 4084	PLUG, 6P, MECHA SW
CN6	614 020 8849	PLUG, 2P, HIGH SPEED (TEST PIN)
CN7	614 223 9223	SOCKET, 3P, TAPE OUT (TEST PIN)
CN8	614 223 9209	SOCKET, 4P, MOTOR
CN9	614 227 3623	SOCKET, 2P, STOP SW
CN10	614 223 0336	ASSY, CONNECTOR-S, 4P W/LEAD, TAPE A HEAD
CN717	614 020 8863	ASSY, CONNECTOR-S, 7P W/LEAD, TAPE B HEAD
CN718	614 020 8900	SOCKET, 5P, FRONT
IC1	409 020 9107	IC LC4069UB
or	409 051 3907	IC TC4069UBP
or	409 059 3206	IC UPD4069UBC
IC501	409 121 8702	IC LA3246
IC502	409 145 8405	IC UPC1330HA
IC521	409 016 8701	IC LA3220
IC551	409 119 9803	IC CXA1101P
Q1	405 001 7001	TR 2SA1015-GR
or	405 005 2002	TR 2SA733-P

PARTS LIST-

Ref. No.	Part No.	Description
Q2	4 05 001 7001	TR 2SA1015-GR
or	4 05 005 2002	TR 2SA733-P
Q3	4 05 011 8609	TR 2SC1740S-S
or	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K
Q4	4 05 001 7001	TR 2SA1015-GR
or	4 05 005 2002	TR 2SA733-P
Q5	4 05 011 8609	TR 2SC1740S-S
or	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K
Q6	4 05 012 7403	TR 2SC2001-K
or	4 05 013 1301	TR 2SC2120-Y
Q8	4 05 011 8609	TR 2SC1740S-S
or	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K
Q9	4 05 011 8609	TR 2SC1740S-S
or	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K
Q10	4 05 011 8609	TR 2SC1740S-S
or	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K
Q501	4 05 011 8609	TR 2SC1740S-S
or	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K
Q502	4 05 011 8609	TR 2SC1740S-S
or	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K
Q504	4 05 011 8609	TR 2SC1740S-S
or	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K
Q505	4 05 011 8609	TR 2SC1740S-S
or	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K
Q506	4 05 011 8609	TR 2SC1740S-S
or	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K
Q507	4 05 011 8609	TR 2SC1740S-S
or	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K
Q508	4 05 011 8609	TR 2SC1740S-S
or	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K
Q510	4 05 011 8609	TR 2SC1740S-S
or	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K
Q509	4 05 011 8609	TR 2SC1740S-S
or	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K
Q510	4 05 011 8609	TR 2SC1740S-S
or	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K
Q601	4 05 011 8609	TR 2SC1740S-S
or	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K
Q602	4 05 011 8609	TR 2SC1740S-S
or	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K
Q604	4 05 011 8609	TR 2SC1740S-S
or	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K
Q605	4 05 011 8609	TR 2SC1740S-S
or	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K
Q606	4 05 011 8609	TR 2SC1740S-S
or	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K
Q607	4 05 011 8609	TR 2SC1740S-S
or	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K
Q608	4 05 011 8609	TR 2SC1740S-S
or	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K
Q609	4 05 011 8609	TR 2SC1740S-S
or	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K
Q981	4 05 012 2002	TR 2SC1815-GR
or	4 05 020 7204	TR 2SC945A-K

STOP SWITCH R.C BOARD ASSY

STOP SWITCH F.C.B. BOARD ASSY		
Ref. No.	Part No.	Description
78	614 221 1717 614 203 7911	ASSY, PCB, STOP SW SWITCH, STOP
CN58	614 223 9209	SOCKET, 2P, DECK

MOTOR IC REGULATOR P.C.BOARD ASSY

Ref. No.	Part No.	Description
79	614 232 8200	ASSY, PCB, IC REG
CN910	614 020 6555	SOCKET, 3P, MAIN-AMP
IC904	▲ 409 168 2107	IC UPC7812HF
or	▲ 409 001 7603	IC AN7812F

PARTS LIST-

CD MAIN P.C.BOARD ASSY

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
80 or	614 230 8639 614 121 5891 614 121 6829 614 016 3858 614 016 3865 614 211 2991	ASSY, PCB, CD MAIN HEAT SINK, FOR IC1601 HEAT SINK, FOR IC1601 PLUG, 3P, TP12-18•14 (TEST PIN) PLUG, 4P, TP1~4 (TEST PIN) SOCKET, 3P W/LEAD, TUN & PRE (CN705)	Q1326 or	405 099 1004 405 099 7501	TR 2SD592-S TR 2SD592-R
T1101	614 194 3596	FILTER, RF COIL	Q1327 or	405 099 0908 405 099 7303	TR 2SB621-S TR 2SB621-R
T1102	614 194 3619	O.S.C COIL, PLL	Q1501 or	405 014 5209 405 011 8500 405 011 8609	TR 2SC2458GR TR 2SC1740S-R TR 2SC1740S
L1401	△ 614 028 4133	FILTER, 10UH	Q1502 or	405 014 5209 405 011 8500 405 011 8609	TR 2SC2458GR TR 2SC1740S-R TR 2SC1740S-S
L1701	△ 614 028 4256	FILTER, 100UH	Q1503 or	405 014 5209 405 011 8500 405 011 8609	TR 2SC2458GR TR 2SC1740S-R TR 2SC1740S-S
X1301	614 215 5523	RESONATOR, 4.19MHZ	Q1504 or	405 014 5209 405 011 8500 405 011 8609	TR 2SC2458GR TR 2SC1740S-R TR 2SC1740S-S
or	614 215 5561	RESONATOR, 4.19MHZ	Q1505 or	405 014 5209 405 011 8500 405 011 8609	TR 2SC2458GR TR 2SC1740S-R TR 2SC1740S-S
X1401	614 215 5509	RESONATOR, 8.64MHZ	Q1602 or	405 001 0309 405 000 4407	TR RN1203 TR DTC124ES
or	614 215 5547	RESONATOR, 8.64MHZ	D1101 or	407 105 0100	VARACTOR DI SVC211-B-AL
SVR1102	614 223 1944	POTENTIOMETER, 100K OHM (B), T.BALANCE	D1103 or	407 007 9904 407 012 4406	DIODE GMA01 DIODE ISS133
SVR1104	614 223 1913	POTENTIOMETER, 20K OHM (B), T.OFFSET	D1104 or	407 007 9904 407 012 4406	DIODE GMA01 DIODE ISS133
CN705	614 020 1222	SOCKET, 3P, TUN & PRE (LINE OUT)	D1105 or	407 007 9904 407 012 4406	DIODE GMA01 DIODE ISS133
CN710	614 017 2102	PLUG, 3P, P.T SEC	D1106 or	407 007 9904 407 012 4406	DIODE GMA01 DIODE ISS133
CN715	614 035 5949	SOCKET, 3P, TUN & PRE	D1201 or	407 007 9904 407 012 4406	DIODE GMA01 DIODE ISS133
CN1001	614 017 2577	PLUG, 6P, PICK-UP SENSER	D1202 or	407 007 9904 407 012 4406	DIODE GMA01 DIODE ISS133
CN1002	614 220 2739	PLUG, 6P, PICK-UP ACTUATOR	D1301 or	407 007 9904 407 012 4406	DIODE GMA01 DIODE ISS133
CN1003	614 017 2553	PLUG, 4P, MOTOR	D1314 or	407 007 9904 407 012 4406	DIODE GMA01 DIODE ISS133
CN1004	614 017 2546	PLUG, 3P, MECHA SW	D1601 or	△ 407 004 9105 407 012 3300	DIODE DSF10C DIODE ISR35-200A
CN1007	614 035 5994	SOCKET, 8P, CD SW	D1602 or	△ 407 004 9105 407 012 3300	DIODE DSF10C DIODE ISR35-200A
CN1008	614 035 6007	SOCKET, 9P, CD SW	D1603 or	△ 407 004 9105 407 012 3300	DIODE DSF10C DIODE ISR35-200A
IC5 or	△ 409 189 4203 △ 409 224 2102	IC M5278D05 IC AN79N05	D1604 or	△ 407 004 9105 407 012 3300	DIODE DSF10C DIODE ISR35-200A
IC1101	409 124 6507	IC LA9200NM	D1609 or	407 007 9904 407 012 4406	DIODE GMA01 DIODE ISS133
IC1201	△ 409 018 5500	IC LA6510	D1610 or	407 007 9904 407 012 4406	DIODE GMA01 DIODE ISS133
IC1202	△ 409 018 5500	IC LA6510	C1117	403 067 6204	MT-COMPO 0.15U J 50V
IC1301	410 099 9608	IC CXP5046H-225S	C1133	403 080 5000	POLYPRO 1000P K 100V
IC1401	409 200 0702	IC LC7860KA	C1235	403 154 2102	NP-ELECT 1U M 50V
IC1402	409 123 7109	IC LC3517BS-15	C1507	403 062 5103	POLYESTER 5600P K 50V
or	409 209 0307	IC UM6116K-2	C1508	403 062 5103	POLYESTER 5600P K 50V
IC1501	409 136 7509	IC LC7881-C	C1511	403 056 7908	POLYESTER 1000P K 50V
IC1601	△ 409 189 4203	IC M5278D05	C1512	403 056 7908	POLYESTER 1000P K 50V
IC1602	△ 409 224 2102	IC AN79N05	C1606	403 043 3104	ELECT 2200U M 16V
Q1101	405 080 7107	TR DTA113ZS	C1607	403 043 3104	ELECT 2200U M 16V
Q1201	405 014 5209	TR 2SC2458GR	R1601	△ 402 044 7104	RESISTOR 0.68 J- 1/2W
or	405 011 8500	TR 2SC1740S-R	R1602	△ 402 044 7104	RESISTOR 0.68 J- 1/2W
or	405 011 8609	TR 2SC1740S-S			
Q1202	405 014 5209	TR 2SC2458GR			
or	405 011 8500	TR 2SC1740S-R			
or	405 011 8609	TR 2SC1740S-S			
Q1203	405 001 0309	TR RN1203			
or	405 000 4407	TR DTC124ES			
Q1206	405 033 6805	TR 2SD1468S-S			
Q1207	405 014 5209	TR 2SC2458GR			
or	405 011 8500	TR 2SC1740S-R			
or	405 011 8609	TR 2SC1740S-S			
Q1300	405 001 0309	TR RN1203			
or	405 000 4407	TR DTC124ES			
Q1301	405 014 5209	TR 2SC2458GR			
or	405 011 8500	TR 2SC1740S-R			
or	405 011 8609	TR 2SC1740S-S			
Q1302	405 001 0309	TR RN1203			
or	405 000 4407	TR DTC124ES			
Q1303	405 014 5209	TR 2SC2458GR			
or	405 011 8500	TR 2SC1740S-R			
or	405 011 8609	TR 2SC1740S-S			
Q1302	405 001 0309	TR RN1203			
or	405 000 4407	TR DTC124ES			
Q1303	405 014 5209	TR 2SC2458GR			
or	405 011 8500	TR 2SC1740S-R			
or	405 011 8609	TR 2SC1740S-S			
Q1302	405 001 0309	TR RN1203			
or	405 000 4407	TR DTC124ES			
Q1303	405 014 5209	TR 2SC2458GR			

CD SWITCH P.C.BOARD ASSY

Ref. No.	Part No.	Description
81	614 230 8653	ASSY, PCB, CD SW
S1701	614 220 5631	SWITCH, TACT, MEMORY
S1702	614 220 5631	SWITCH, TACT, PLAY/PAUSE
S1703	614 220 5631	SWITCH, TACT, OPEN/CLOSE
S1704	614 220 5631	SWITCH, TACT, REPEAT
S1705	614 220 5631	SWITCH, TACT, BACK
S1706	614 220 5631	SWITCH, TACT, FWD

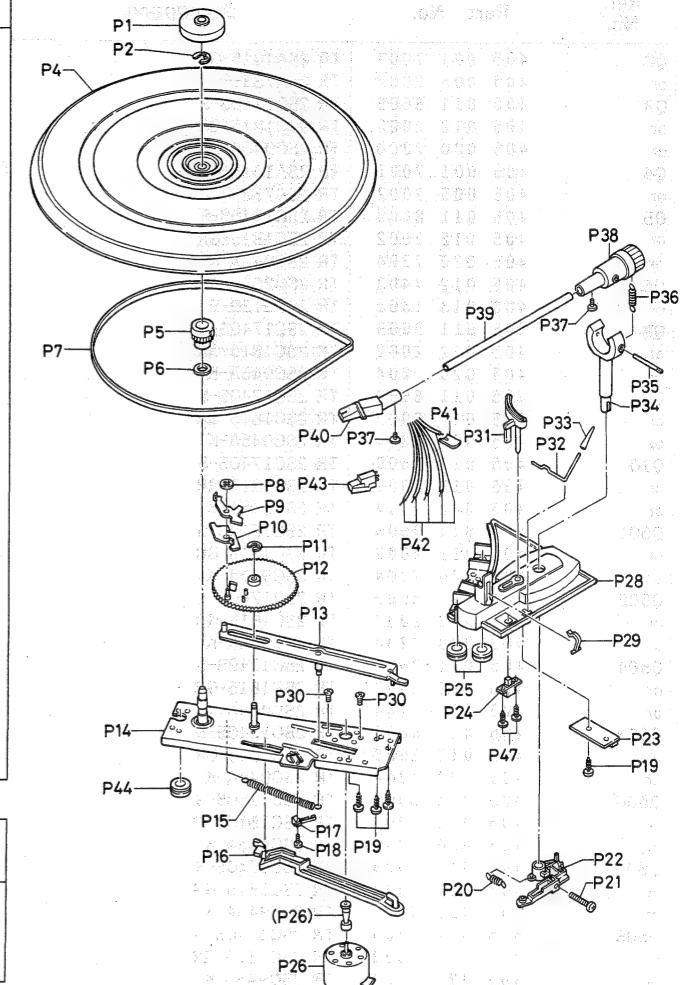
PARTS LIST

Ref. No.	Part No.	Description
S1707	614 220 5 631	SWITCH, TACT, STOP
S1708	614 220 5 631	SWITCH, TACT, EDIT
CN1007	614 035 4 973	SOCKET, 8P, CD-MAIN
CN1008	614 035 4 980	SOCKET, 9P, CD-MAIN
Q1701	405 082 4 609	TR DTA123YS
Q1702	405 082 4 609	TR DTA123YS
Q1703	405 082 4 609	TR DTA123YS
D1701	407 081 5 106	LED SL-1283-20, 2-DIGIT 8-SEGMENT
D1702	407 007 9 904 or 407 012 4 406	DIODE GMA01
D1703	407 007 9 904 or 407 012 4 406	DIODE ISS133
D1704	408 011 8 709 or 408 012 1 808	DIODE GMA01 DIODE ISS133 LED SLR-56MC70F130-P, PLAY/PAUSE LED SLR-56MC70F130-Q, PLAY/PAUSE
D1705	408 008 9 108 or 408 008 9 207	LED SLR-56VC70F130-N, REPEAT
D1706	408 008 9 108 or 408 008 9 207	LED SLR-56VC70F130-N, PROG.
D1708	408 008 9 108 or 408 008 9 207	LED SLR-56VC70F130-N, EDIT
D1709	408 008 9 108 or 408 008 9 207	LED SLR-56VC70F130-N, SIDE-A
D1710	408 008 9 108 or 408 008 9 207	LED SLR-56VC70F130-N, SIDE-B
		LED SLR-56VC70F130-N, SIDE-B

EXPLODED VIEW & PARTS LIST(TURN TABLE MECHANISM)

TURNTABLE MECHANISM (PM-X701/ML)

Ref. No.	Part No.	Description
P1	614 120 0118	SPACER, 45 ADAPTOR
P2	411 001 0508	RING E 6
P4	614 225 8866	TURNTABLE
P5	614 225 8835	GEAR, CENTER
P6	412 037 6700	SPECIAL WASHER, TURN TABLE
P7	614 225 8873	BELT, FLAT
P8	412 037 6809	SPECIAL WASHER
P9	614 225 8941	LEVER, TRIP POWL
P10	614 225 8958	LEVER, TRIP CLUTCH
P11	412 029 9702	SPECIAL WASHER
P12	614 225 8842	GEAR
P13	614 225 8248	ASSY, SLIDE
P14	614 225 8217	ASSY, CHASSIS
P15	614 201 8385	SPRING COIL
P16	614 225 8972	LEVER, TRIP LEVER
P17	614 202 0920	SWITCH
P18	411 022 7807	SCR S-TPG PAN 2X6
P19	411 023 4003	SCR S-TPG PAN 3X10
P20	614 225 9085	SPRING, TENS
P21	411 002 7209	SCR PAN 3X16
P22	614 225 8989	LEVER
P24	614 225 9146	SWITCH, SLIDE, 45/33
P25	614 225 8781	CUSHION, RUBBER
P26	614 225 8170	ASSY, MOTOR
P28	614 225 8590	CHASSIS
P29	614 225 8811	CLAMP, ARM ROCK
P30	412 037 1002	SPECIAL SCREW, MOTOR FIX
P31	614 225 8910	LIFTER
P32	614 225 9023	ROD, CUE
P33	614 225 8514	KNOB, CUE
P44	614 225 8774	CUSHION, RUBBER
P47	411 022 7807	SCR S-TPG PAN 2X6



PCB ASSY

Ref. No.	Part No.	Description
P23	614 225 8163 614 006 9655 614 016 8105	ASSY, PCB VR PLUG, 5P

TONE ARM ASSY

Ref. No.	Part No.	Description
P34	614 225 8224	ASSY, TONE ARM
P35	614 225 8798	HOLDER
P36	614 225 8675	SHAFT, PIVOT PIN
P37	614 225 9078	SPRING, TENS
P38	411 022 9900	SCR S-TPG PAN 2.3X5
P39	614 225 8743	SUPPORT, PIVOT
P40	614 225 8927	PIPE
P41	614 225 8729	HEAD SHELL
P42	614 225 8187	LUG
P43	614 213 4740 614 213 4757	ASSY, WIRE CARTRIDGE (MG2551) STYLUS, ST-59U

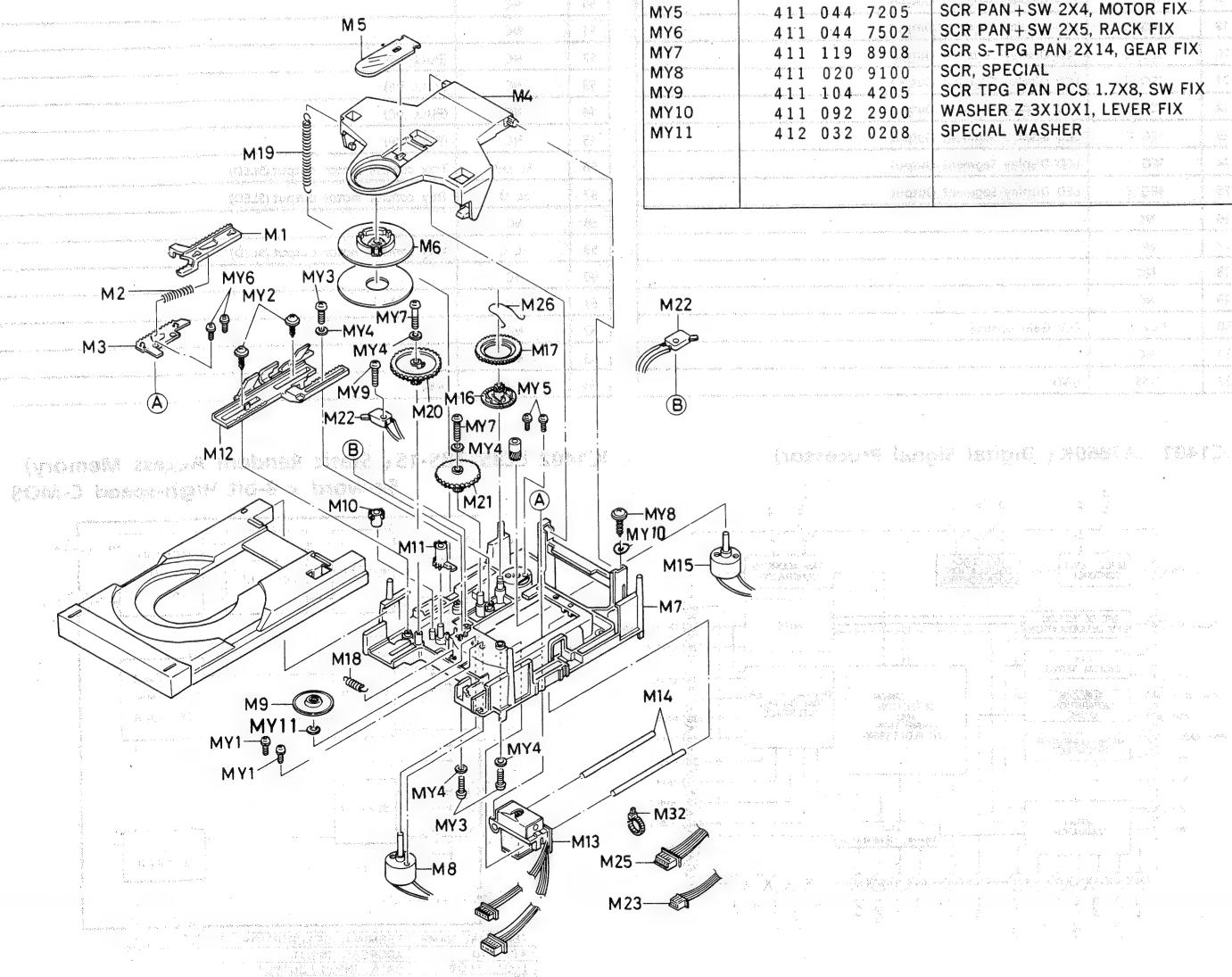
YAMA CHASSIS & MOTOR ASSEMBLY

Ref. No.	Part No.	Description
	614 225 8000	YAMA CHASSIS
	614 225 8001	MOTOR ASSEMBLY
	614 225 8002	YAMA CHASSIS
	614 225 8003	MOTOR ASSEMBLY
	614 225 8004	YAMA CHASSIS
	614 225 8005	MOTOR ASSEMBLY
	614 225 8006	YAMA CHASSIS
	614 225 8007	MOTOR ASSEMBLY
	614 225 8008	YAMA CHASSIS
	614 225 8009	MOTOR ASSEMBLY
	614 225 8010	YAMA CHASSIS
	614 225 8011	MOTOR ASSEMBLY
	614 225 8012	YAMA CHASSIS
	614 225 8013	MOTOR ASSEMBLY
	614 225 8014	YAMA CHASSIS
	614 225 8015	MOTOR ASSEMBLY
	614 225 8016	YAMA CHASSIS
	614 225 8017	MOTOR ASSEMBLY
	614 225 8018	YAMA CHASSIS
	614 225 8019	MOTOR ASSEMBLY
	614 225 8020	YAMA CHASSIS
	614 225 8021	MOTOR ASSEMBLY
	614 225 8022	YAMA CHASSIS
	614 225 8023	MOTOR ASSEMBLY
	614 225 8024	YAMA CHASSIS
	614 225 8025	MOTOR ASSEMBLY
	614 225 8026	YAMA CHASSIS
	614 225 8027	MOTOR ASSEMBLY
	614 225 8028	YAMA CHASSIS
	614 225 8029	MOTOR ASSEMBLY
	614 225 8030	YAMA CHASSIS
	614 225 8031	MOTOR ASSEMBLY
	614 225 8032	YAMA CHASSIS
	614 225 8033	MOTOR ASSEMBLY
	614 225 8034	YAMA CHASSIS
	614 225 8035	MOTOR ASSEMBLY
	614 225 8036	YAMA CHASSIS
	614 225 8037	MOTOR ASSEMBLY
	614 225 8038	YAMA CHASSIS
	614 225 8039	MOTOR ASSEMBLY
	614 225 8040	YAMA CHASSIS
	614 225 8041	MOTOR ASSEMBLY
	614 225 8042	YAMA CHASSIS
	614 225 8043	MOTOR ASSEMBLY
	614 225 8044	YAMA CHASSIS
	614 225 8045	MOTOR ASSEMBLY
	614 225 8046	YAMA CHASSIS
	614 225 8047	MOTOR ASSEMBLY
	614 225 8048	YAMA CHASSIS
	614 225 8049	MOTOR ASSEMBLY
	614 225 8050	YAMA CHASSIS
	614 225 8051	MOTOR ASSEMBLY
	614 225 8052	YAMA CHASSIS
	614 225 8053	MOTOR ASSEMBLY
	614 225 8054	YAMA CHASSIS
	614 225 8055	MOTOR ASSEMBLY
	614 225 8056	YAMA CHASSIS
	614 225 8057	MOTOR ASSEMBLY
	614 225 8058	YAMA CHASSIS
	614 225 8059	MOTOR ASSEMBLY
	614 225 8060	YAMA CHASSIS
	614 225 8061	MOTOR ASSEMBLY
	614 225 8062	YAMA CHASSIS
	614 225 8063	MOTOR ASSEMBLY
	614 225 8064	YAMA CHASSIS
	614 225 8065	MOTOR ASSEMBLY
	614 225 8066	YAMA CHASSIS
	614 225 8067	MOTOR ASSEMBLY
	614 225 8068	YAMA CHASSIS
	614 225 8069	MOTOR ASSEMBLY
	614 225 8070	YAMA CHASSIS
	614 225 8071	MOTOR ASSEMBLY
	614 225 8072	YAMA CHASSIS
	614 225 8073	MOTOR ASSEMBLY
	614 225 8074	YAMA CHASSIS
	614 225 8075	MOTOR ASSEMBLY
	614 225 8076	YAMA CHASSIS
	614 225 8077	MOTOR ASSEMBLY
	614 225 8078	YAMA CHASSIS
	614 225 8079	MOTOR ASSEMBLY
	614 225 8080	YAMA CHASSIS
	614 225 8081	MOTOR ASSEMBLY
	614 225 8082	YAMA CHASSIS
	614 225 8083	MOTOR ASSEMBLY
	614 225 8084	YAMA CHASSIS
	614 225 8085	MOTOR ASSEMBLY
	614 225 8086	YAMA CHASSIS
	614 225 8087	MOTOR ASSEMBLY
	614 225 8088	YAMA CHASSIS
	614 225 8089	MOTOR ASSEMBLY
	614 225 8090	YAMA CHASSIS
	614 225 8091	MOTOR ASSEMBLY
	614 225 8092	YAMA CHASSIS
	614 225 8093	MOTOR ASSEMBLY
	614 225 8094	YAMA CHASSIS
	614 225 8095	MOTOR ASSEMBLY
	614 225 8096	

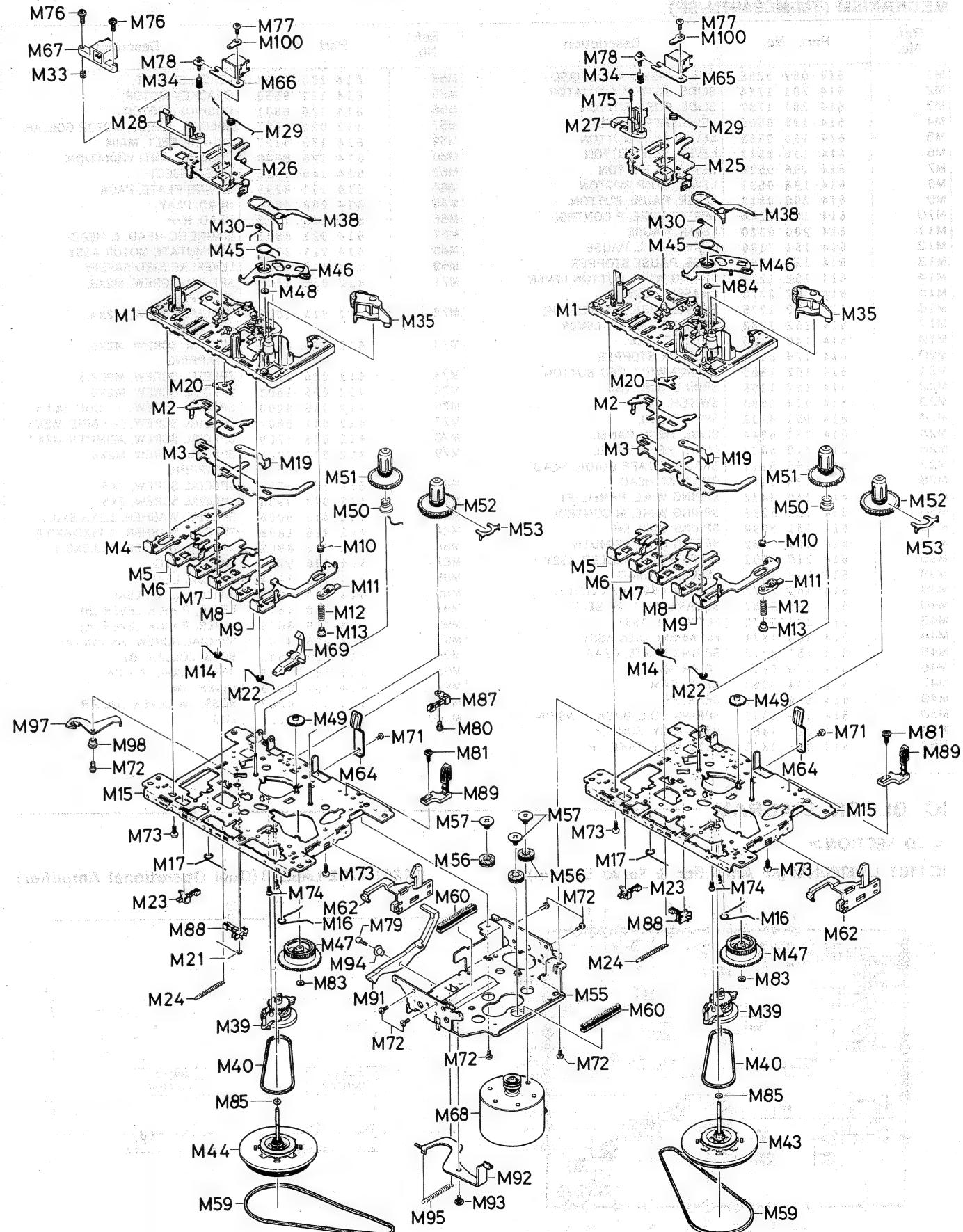
EXPLODED VIEW & PARTS LIST(CD MECHANISM)

MECHANISM (P/N-DADS6/SP)

Ref. No.	Part No.	Description
M1	614 216 9766	GEAR, PICK UP RACK UPPER
M2	614 216 9896	SPRING, COMP, RACK BACK
M3	614 216 9759	GEAR, PICK UP RACK LOWER
M4	614 216 9858	LEVER, CHUCK
M5	614 211 6654	SPRING PLATE, CHUCK
M6	614 219 0104	ASSY, PULLEY, CHUCK
M7	614 216 9728	CHASSIS
M8	614 045 2105	COMMUTATE MOTOR, SPINDLE
M9	614 216 9841	TURNTABLE
M10	614 216 9742	GEAR, CHANGE SLIDE
M11	614 216 9810	GEAR, CHANGE RACK
M12	614 216 9865	SLIDE, DRIVING
M13	614 218 6855	PICKUP, LASER
M14	614 145 9622	SHAFT, PICK UP GUIDE
M15	614 217 7068	COMMUTATE MOTOR ASSY, SLED
M16	614 216 9797	GEAR, CLUTCH INNER
M17	614 216 9780	GEAR, CLUTCH OUTER



EXPLODED VIEW (TAPE MECHANISM)



PARTS LIST (TAPE MECHANISM)

MECHANISM (TM-MC949TN/SP)

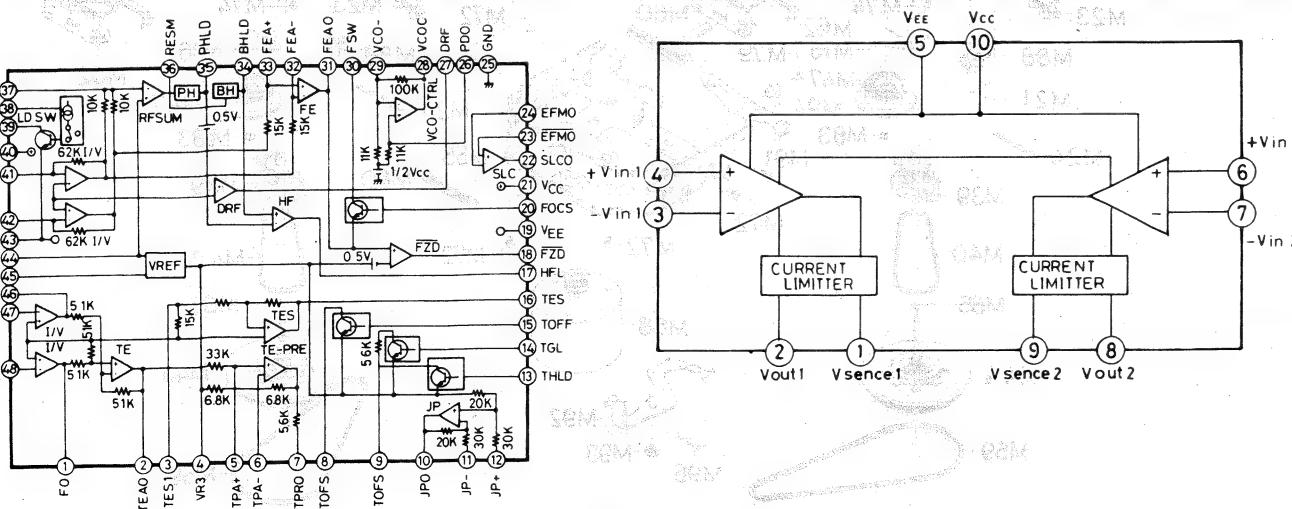
Ref. No.	Part No.	Description
M1	614 067 3258	SUB CHASSIS ASSY, BASE
M2	614 201 1744	SLIDE, SWITCH ACTUATOR
M3	614 201 1737	SLIDE, PUSH BUTTON
M4	614 196 0500	LEVER, REC BUTTON
M5	614 196 0555	LEVER, PLAY BUTTON
M6	614 196 0517	LEVER, REW BUTTON
M7	614 196 0524	LEVER, FF BUTTON
M8	614 196 0531	LEVER, STOP BUTTON
M9	614 208 0313	LEVER, PAUSE BUTTON
M10	614 152 1244	SPRING WIRE, P CONTROL
M11	614 208 0320	LEVER, PAUSE
M12	614 151 7186	SPRING COIL, PAUSE
M13	614 129 0669	BOSS, PAUSE STOPPER
M14	614 152 1251	SPRING WIRE, BUTTON LEVER
M15	614 067 2770	CHASSIS ASSY
M16	614 152 1275	SPRING WIRE, E ACTUATOR
M17	614 152 1282	SPRING WIRE, P.S LEVER
M19	614 140 1539	LEVER, E KICK
M20	614 129 0676	BOSS, PR STOPPER
M21	614 152 1305	SPRING WIRE, REC BUTTON
M22	614 152 1268	SPRING WIRE (B)
M23	614 024 1693	SWITCH, LEAF
M24	614 151 4703	SPRING COIL
M25	614 211 6944	SLIDE, HEAD PANEL
M26	614 210 6822	SLIDE, HEAD PANEL
M27	614 146 5111	BRACKET TAPE GUIDE, HEAD
M28	614 196 0470	BRACKET HEAD
M29	614 210 3432	SPRING WIRE, PANEL (P)
M30	614 152 1299	SPRING WIRE, M CONTROL
M33	614 151 5090	SPRING COIL, EH
M34	614 151 7162	SPRING COIL, AZIMUTH
M35	614 210 3302	LEVER PINCH ROLLER ASSY
M38	614 140 1614	LEVER, SENSING
M39	614 069 2273	PULLEY ASSY, RF CLUTCH
M40	614 195 5087	SQUARE BELT, RF BELT
M43	614 204 8672	FLYWHEEL ASSY
M44	614 068 1871	FLYWHEEL DISK ASSY
M45	614 151 8312	SPRING PLATE, GEAR
M46	614 070 0916	LEVER ASSY
M47	614 134 9053	GEAR, CAM
M49	614 134 9046	GEAR, FF
M50	614 205 1337	SPRING COIL, BACK TENSION
M51	614 211 3868	REEL ASSY, SUPPLY
M52	614 211 3875	REEL ASSY, TAKE UP

Ref. No.	Part No.	Description
M53	614 195 5094	LEVER, SENSER
M55	614 122 9553	BRACKET MOTOR
M56	614 126 6831	CUSHION, MOTOR
M57	412 026 1907	SPECIAL SCREW, MOTOR COLLAR
M59	614 133 4127	SQUARE BELT, MAIN
M60	614 126 6848	CUSHION, ANTI VIBRATION
M62	614 140 1522	LEVER, EJECT
M64	614 151 8299	SPRING PLATE, PACK
M65	614 208 4069	HEAD, PLAY
M66	614 208 4052	HEAD, R/P
M67	614 021 8831	MAGNETIC HEAD, E. HEAD
M68	614 211 3752	COMMUTATE MOTOR ASSY
M69	614 140 1508	LEVER, RECORD SAFETY
M71	412 026 1402	SPECIAL SCREW, M2X3, C TAPPING
M72	412 026 2003	SPECIAL SCREW, M2X4, C TAPPING
M73	412 026 2201	SPECIAL SCREW, M2X5, P TAPPING
M74	412 026 2300	SPECIAL SCREW, M2X4.5
M75	412 026 1501	SPECIAL SCREW, M2X6
M76	412 036 8200	SPECIAL SCREW, +- CUP 2X7.5
M77	412 031 6607	SPECIAL SCREW, (+) BIND M2X3
M78	412 026 1709	SPECIAL SCREW, AZIMUTH M2X7
M79	412 031 7901	SPECIAL SCREW, M2X6, C TAPPING
M80	614 124 4594	SPECIAL SCREW, 2X5
M81	412 023 0903	SPECIAL SCREW, 2X5
M83	412 013 5000	SPECIAL WASHER, 1.2X3 8X0.3
M84	412 026 1808	SPECIAL WASHER, 1.45X3.8X0.5
M85	412 013 8902	SPECIAL WASHER, 2X3.5X0.3
M87	614 196 9756	SWITCH, REC
M88	614 195 4424	SWITCH, LEAF
M89	614 209 3849	SWITCH, LEAF, LEAF
M91	614 140 1676	LEVER, P KICK LEVER (B)
M92	614 139 8679	LEVER, P KICK LEVER (A)
M93	412 005 8101	SPECIAL SCREW, PK COLLAR
M94	614 129 0683	BOSS, COLLAR (B)
M95	614 151 4758	SPRING COIL, P KICK
M97	614 197 0219	LEVER, SW
M98	614 197 0202	BOSS, SW LEVER COLLAR
M100	614 208 0276	LUG

IC BLOCK DIAGRAM

<CD SECTION>

IC1101 LA9200NM (RF Amplifier & Servo System)



IC BLOCK DIAGRAM

IC1401 Pin Function of LC7860K (Digital Signal Processor)

Pin No.	Pin Name	I/O	Functions
1	TEST1	I	—
2	AO	O	—
3	AI	I	—
4	PDO	O	—
5	Vss	—	GND
6	EFMO	O	—
7	EFMO	O	—
8	EFMIN	I	—
9	TEST2	I	—
10	VDD	—	+5V
11	CLV+	O	—
12	CLV-	O	—
13	FOCS	O	—
14	FST	O	—
15	FZD	I	—
16	HFL	I	*1
17	TES	I	*1
18	FSEQ/PCK	O	*2
19	TOFF	O	*1
20	TGL	O	*1
21	THLD	O	*1
22	JP+	O	*1
23	JP-	O	*1
24	DEMO	I	—
25	TEST3	I	—
26	EMPH	O	—
27	DFOFF	I	—
28	DSPOFF	I	—
29	SMP2	O	*3
30	LRCLK	O	*3
31	VDD	—	*4
32	SMP3	O	*3
33	SMP1	O	*3
34	DFOUT	O	*3
35	DACLK	O	*3
36	DFIN	I/O	*5
37	LRSY	O	*6
38	MSBF	I	*3
39	CK2	O	—
40	AD10	O	*7
41	AD10	O	*8
42	OE	O	*8
43	AD9	O	*7

2.1609MHz

*7 RAM address output
*8 Output state when WE = L and input state when WE = H. OE is for input/output control.

Pin No.	Pin Name	I/O	Functions
44	AD8	O	*7
45	AD7	O	*7
46	AD6	O	*7
47	AD5	O	*7
48	AD4	O	*7
49	AD3	O	*7
50	AD2	O	*7
51	AD1	O	*7
52	AD0	O	*7
53	DB7	I/O	*9
54	DB6	I/O	*9
55	DB5	I/O	*9
56	Vss	—	*10
57	DB4	I/O	*9
58	DB3	I/O	*9
59	DB2	I/O	*9
60	DB1	I/O	*9
61	DB0	I/O	*9
62	TEST4	I	—
63	TEST5	I	—
64	IOFF	I	—
65	EFLG	O	—
66	PW	O	—
67	PWSY	O	—
68	SBCK	I	—
69	FSX	O	—
70	WRQ	O	*11
71	RWC	I	*11
72	SQOUT	O	*11
73	VDD	—	*11
74	COIN	I	*11
75	CQCK	I	*11
76	RES	I	*12
77	M/L	I	*11
78	Vss	—	GND
79	XIN	I	—
80	XOUT	O	—

*9 DB7 to DB0: connected to RAM data pins.
*10 GND

*11 Test pin. Normally not connected.

*12 For CD ROM. HIGH time interpolation and holding of previous value not performed.

*13 C1/C2 1-level and 2-level error correction

*14 PWSY is SYNC combining main and sub and change from HIGH to LOW is taken externally. The P, Q, R, S, T, U, V, and W subcodes are read by sending 8 clock pulses to SBCK.

*15 WRQ goes HIGH when data of subcode Q passes CRC check.

This is taken externally and the data from SQOUT is read by sending CQCK. When data is required with LSB first, M/L is driven LOW. After the microprocessor sets RWC to HIGH, the command is given by output synchronized with the CQCK command data.

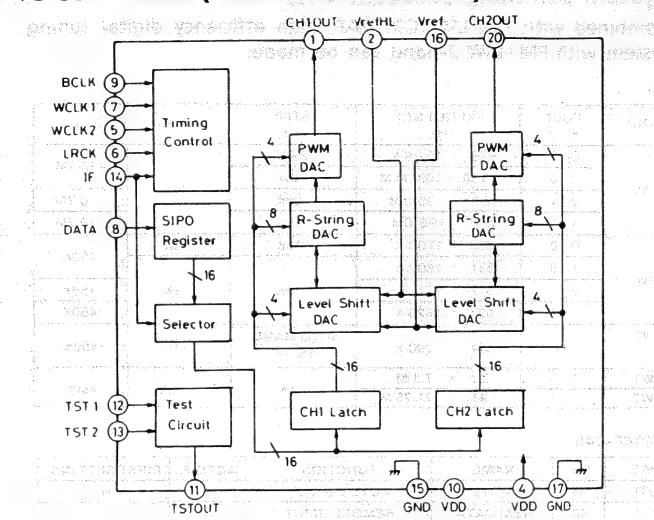
*16 Goes LOW once when power is turned on.

*17 Pin for connection to 8.6436MHz crystal oscillator

IC BLOCK DIAGRAM

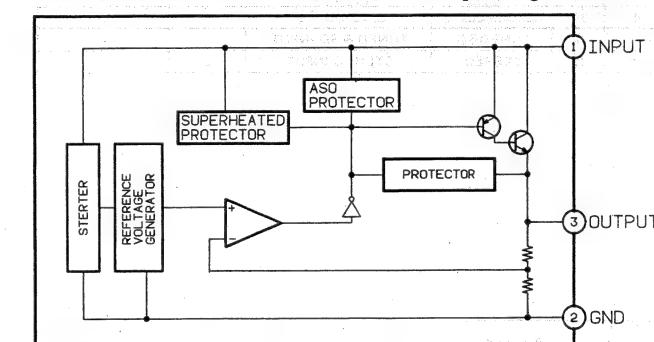
IC1501 LC7881 (16-Bit D/A Converter)

Pin Function of IC1501 (LC7881)

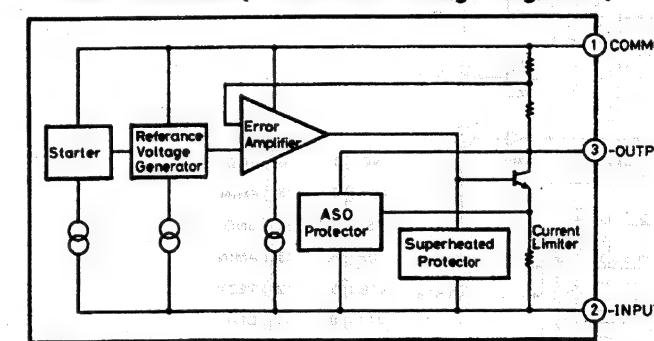


No	Pin Name	Description
1	CH1 OUT	Output Terminal of CH-1
2	VrefH	Input Terminal of Reference Voltage "H"
3	NC	No Connection
4	VDD	+5V Power Supply Terminal
5	WCLK2	Input Terminal of Word-Clock 2. When IF is in "L", internal signal for latching CH-1 data of digital signal is made by using trailing edge WCLK2. When IF is in "H", it needs WCLK2 is in "L".
6	LRCK	Input Terminal of LR Clock. Indicates CH-1 and CH-2 of input digital audio data : indicate CH1 when LRCK is in "H". indicate CH2 when LRCK is in "L".
7	WCLK2	Input Terminal of Word-Clock 1. When IF is in "L", internal signal for latching CH-2 data of digital signal is made by using trailing edge WCLK1. When IF is in "H", internal signal for latching CH-1 and CH-2 data of digital signal is made by using trailing edge WCLK1.
8	DATA	Input Terminal of digital audio data. When IF is in "L", digital audio data is input in bit serial from LSB. When IF is in "H", digital audio data is input in bit serial from MSB.
9	BCLK	Bit-Clock Terminal. This clock is for reading digital audio data into LSI in bit serial and is for PWMDAC.
10	VDD	+5V Power Supply Terminal
11	TSTOUT	Output Terminal for Testing. Ordinarily, leave this terminal open.
12	TST1	Input Terminal for Testing. Ordinarily, ground these terminals.
13	TST2	Input Terminal for Testing. Ordinarily, ground these terminals.
14	IF	Interface Select Terminal. When IF is in "L", digital audio data is input from LSB side. When IF is in "H", digital audio data is input from MSB side.
15	GND	Ground Terminal
16	VrefL	Input Terminal of Reference Voltage "L".
17	GND	Ground Terminal
18	NC	No Connection
19	NC	No Connection
20	CH2OUT	Output Terminal of CH2.

IC1601 M5278D05 (3 Terminal Voltage Regulator)

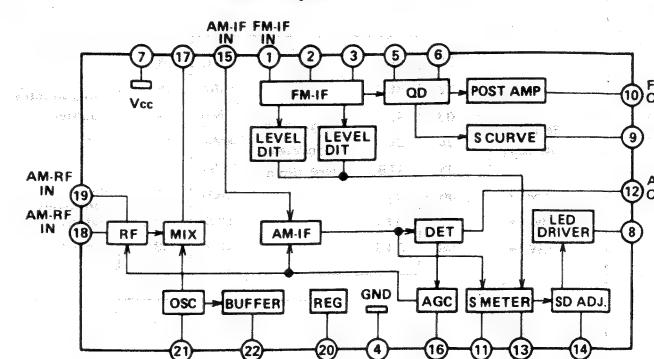


IC1602 AN79N05 (3 Terminal Voltage Regulator)

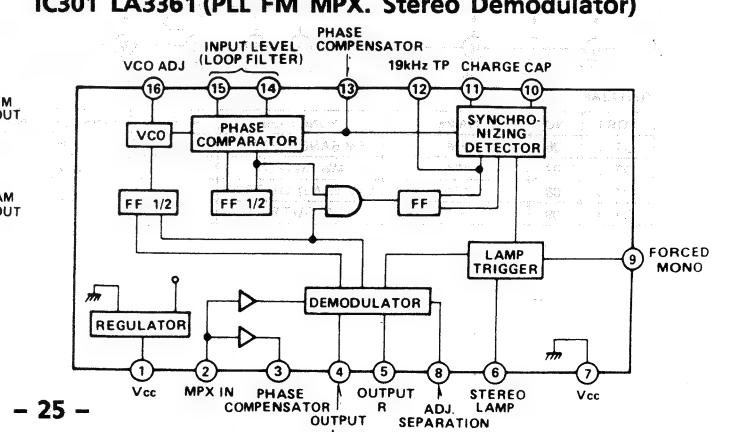


< TUNER SECTION >

IC201 LA1265 (Tuner System)

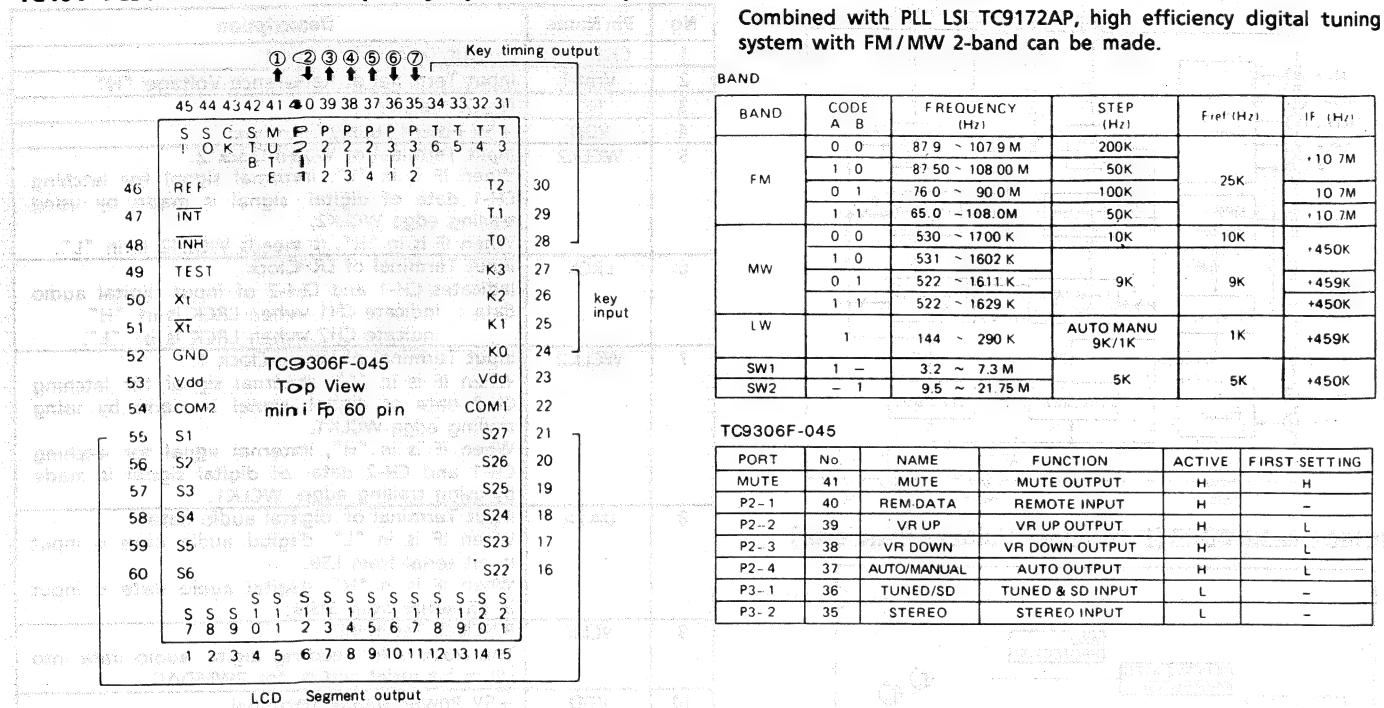


IC301 LA3361 (PLL FM MPX. Stereo Demodulator)

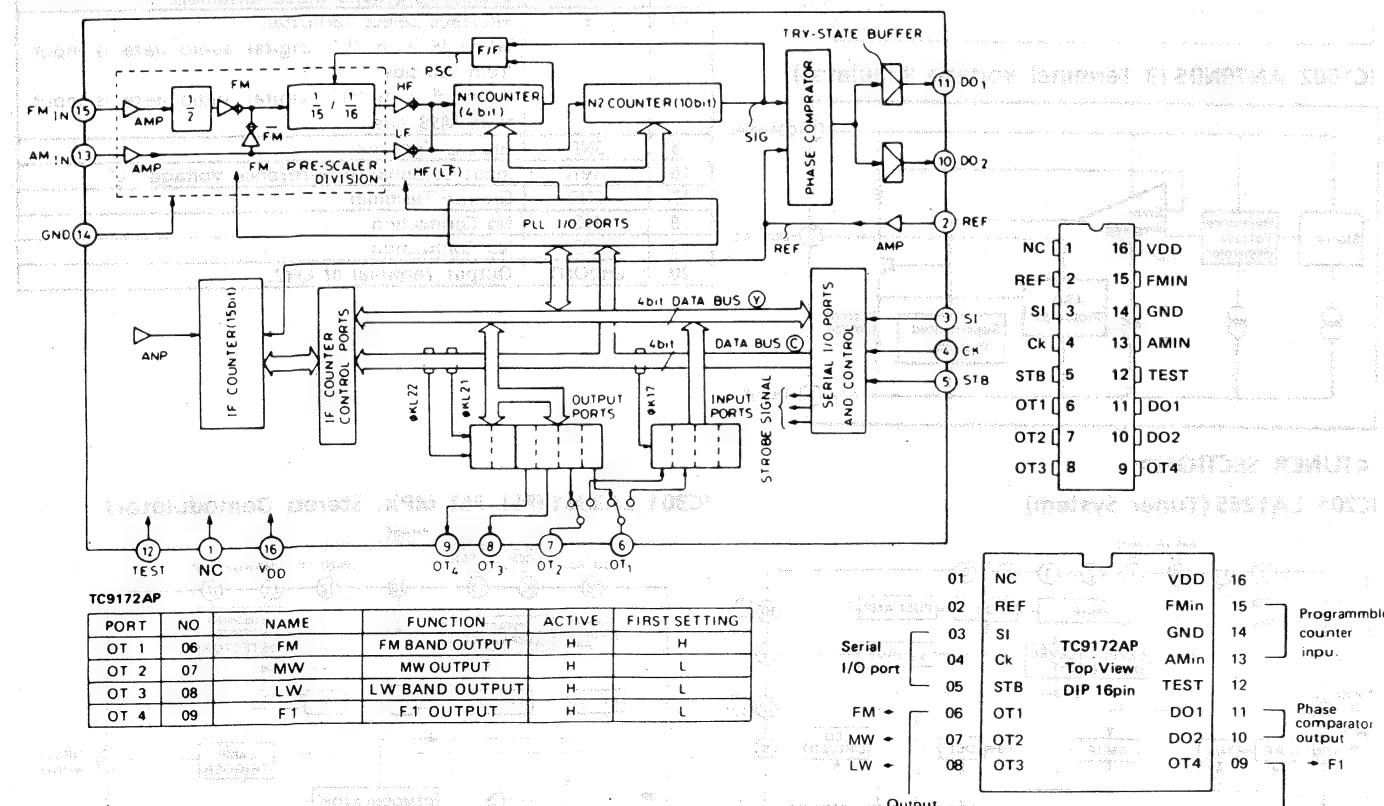


IC BLOCK DIAGRAM

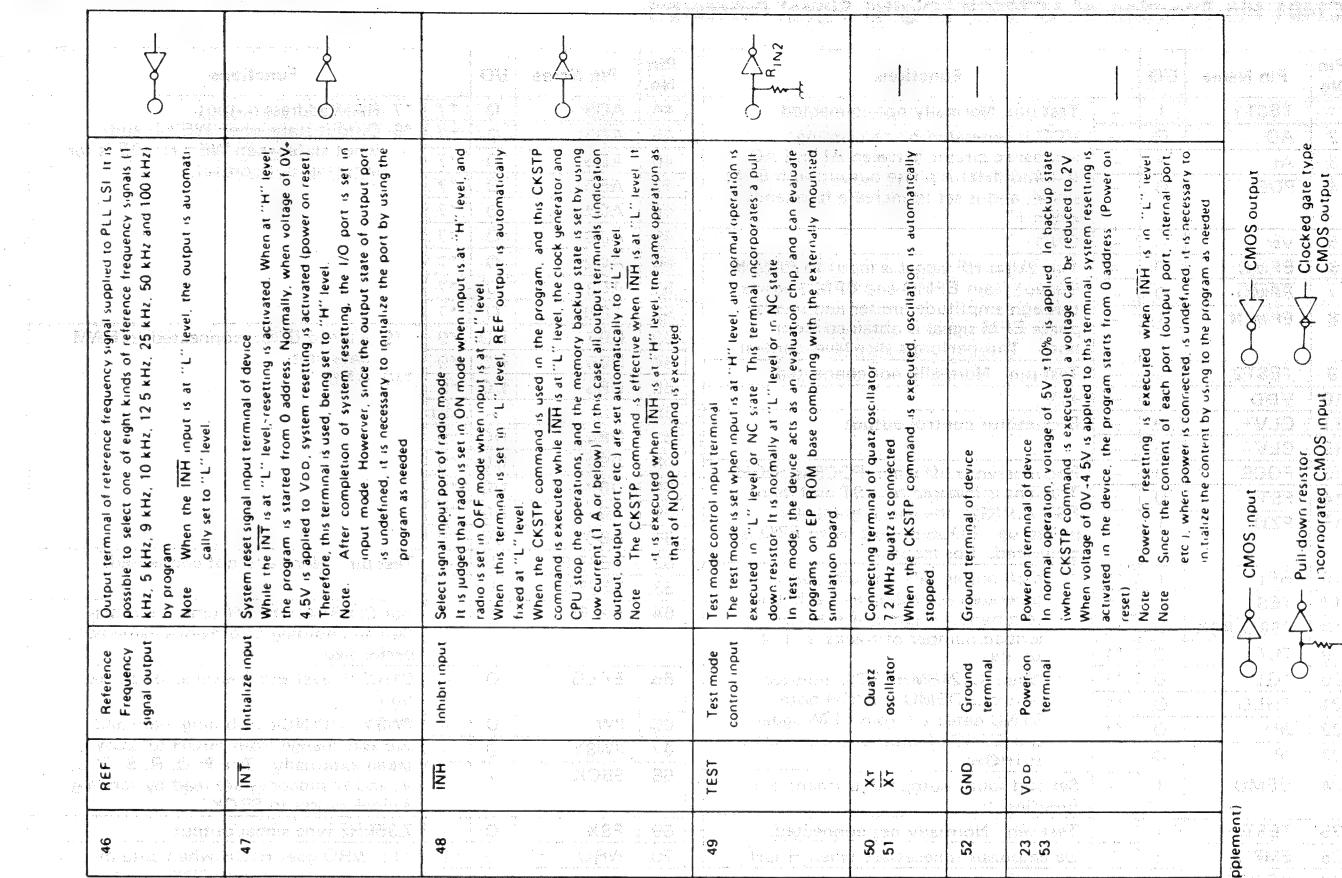
IC401 TC9306F-045-BS (Frequency Synthesizer System) System Summary (TC9306F-045)



IC402 TC9172AP (High-Speed PLL with Pre-Scaler)



IC BLOCK DIAGRAM



Pin Function of TC9306F-045

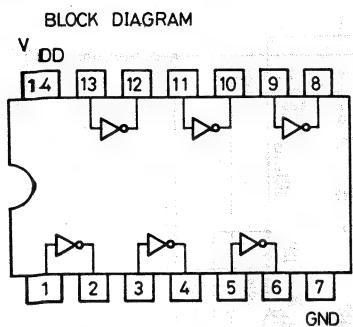
Explanation of terminal functions

Pin No.	Symbol	Terminal name	Description of function and operation	Remarks
22	COM1	LCD common output	Terminal to output common signal output to LCD	V _{DD}
54	COM2		It is possible to indicate max. 54 segments by using the matrix S1-S27 At this terminal, three levels of V _{DD} , 1/2 V _{DD} and GND are output with intervals of 5 ms at a frequency of 50 Hz.	When the CKSTP command is used to the program, the output port is automatically set to "L" level.
55-60	S1~S6 1~21	S1~S27	Note: During system resetting or when CKSTP command is executed, output is automatically set to "L" level.	
24~27	K0~K3	Key input port	4 bit input port for key matrix input.	When KEY command which assigns this port at the operand part is executed, this port is read to RAM. All the terminals incorporate pull-down resistor.
28~34	T0~T6	Key timing output port	These ports are normally used for key return timing signal output of key matrix.	The output parts of To T6 are normally used for key return timing signal output.
35	P3.2	I/O port 3 A/D IN	4 bit I/O port	To A/D converter
36	P3.1	reference voltage input	2 bit I/O port	A/D converter
37~40	P2.4~P2.1	I/O port 2	4 bit I/O port.	Power on terminal of device
41	MUTE	Muting signal output port	1 bit output port. This port is normally used for muting control signal output.	In normal operation, voltage of 5V 10% is applied to this terminal. System resetting is executed when CKSTP command is executed. A voltage can be reduced to 2V when CKSTP command is executed.
42	STB	Strobe pulse output	Note: When the INH input is changed from "H" to "L" or "L" to "H", the output is automatically set to "H" level.	When INH is in "L" level, power on terminal is activated in the device. The program starts from 0 address (Power on reset).
43	CX	Serial clock output	Serial interface	Note: Power on resetting is executed when the content of each port (output port, internal port etc.) when power is connected is undefined. It is necessary to initialize the content by using the program as needed.
44	SO	Serial data output	By executing the SIO command, the externally mounted PLL LSI or an optional IC of peripheral part can be controlled. The serial transferring mode, NCD or NCD, can be selected as programmed.	
45	SI	Serial data input	Serial data input	

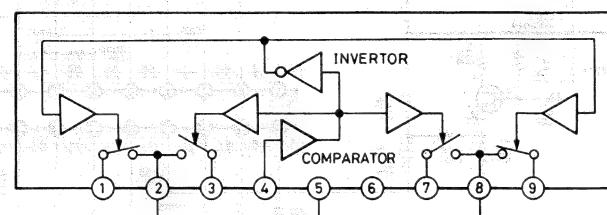
IC BLOCK DIAGRAM

<DECK SECTION>

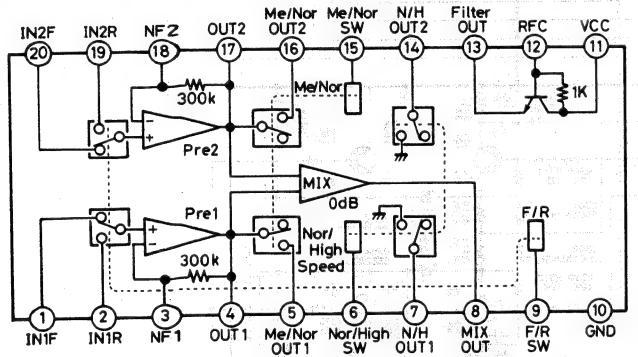
IC001 LA4069(Hex Inverter)



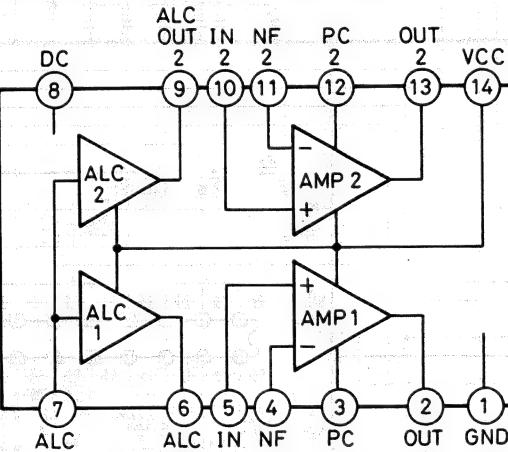
IC502 μPC1330HA (2-Channel Head Select Switch for Tape Deck)



IC501 LA3246(Pre & Mixing Amplifier with Electrical Switch)

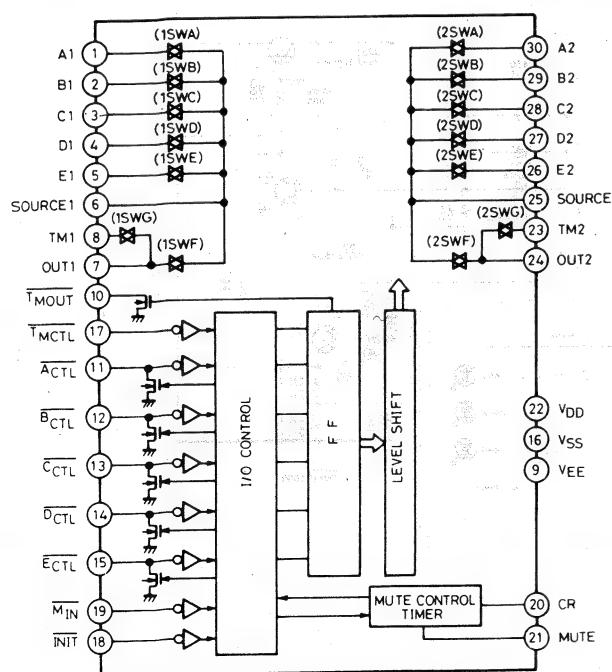


IC521 LA3220(Dual Pre-Amplifier)

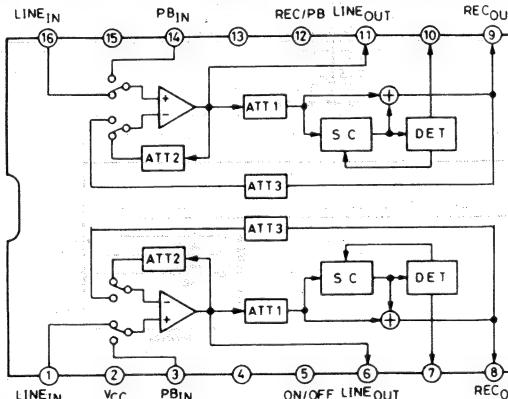


<AMP. SECTION>

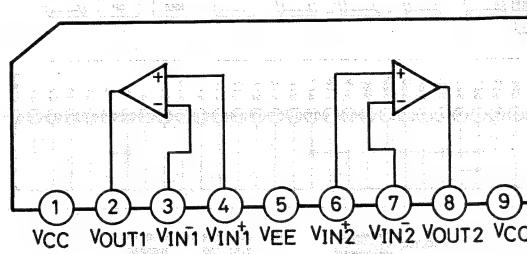
IC702 LC7818(2-Pole 4-Position Analog Function Switch)



IC551 CXA1101P(Dolby B-Type Noise Reduction)

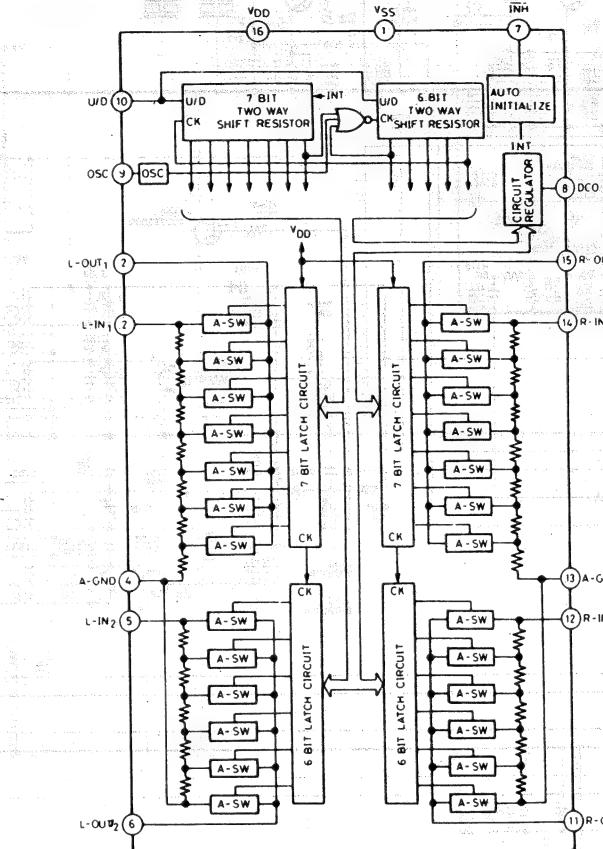


IC701·711 LA6458S(Dual Operational Amplifier)

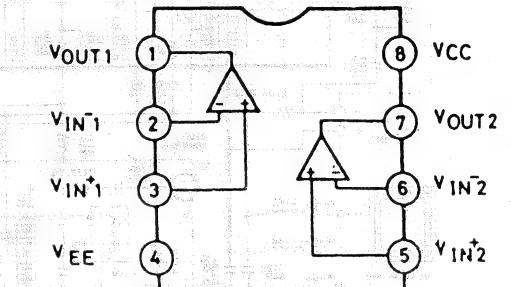


IC BLOCK DIAGRAM

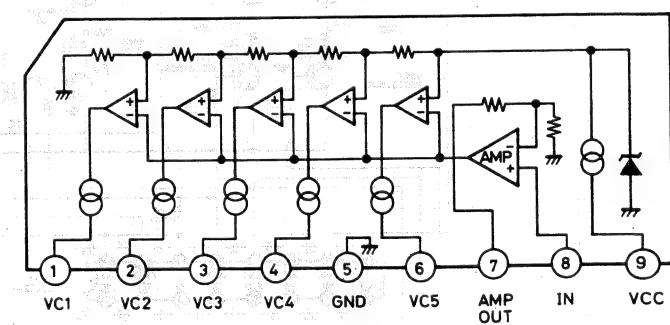
IC705 TC9153AP(Electronic Volume)



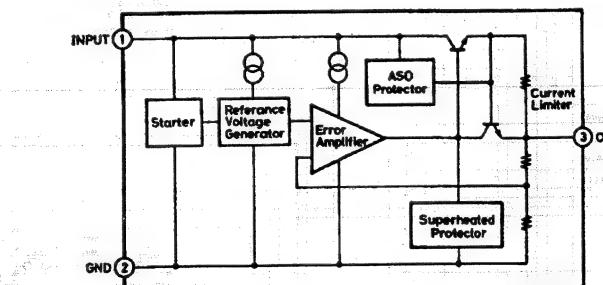
IC706 LA6458D(Dual Operational Amplifier)



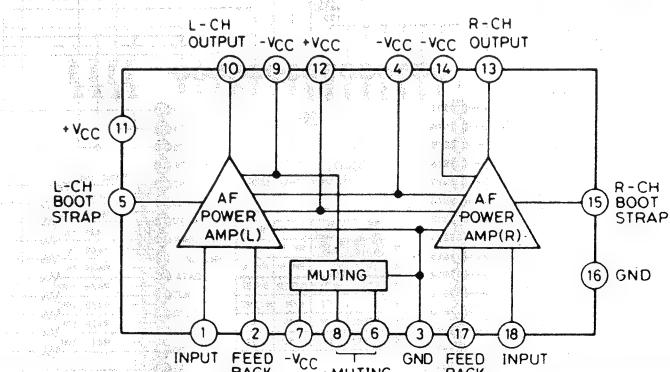
IC707 BA1433(LED Level Meter Driver)



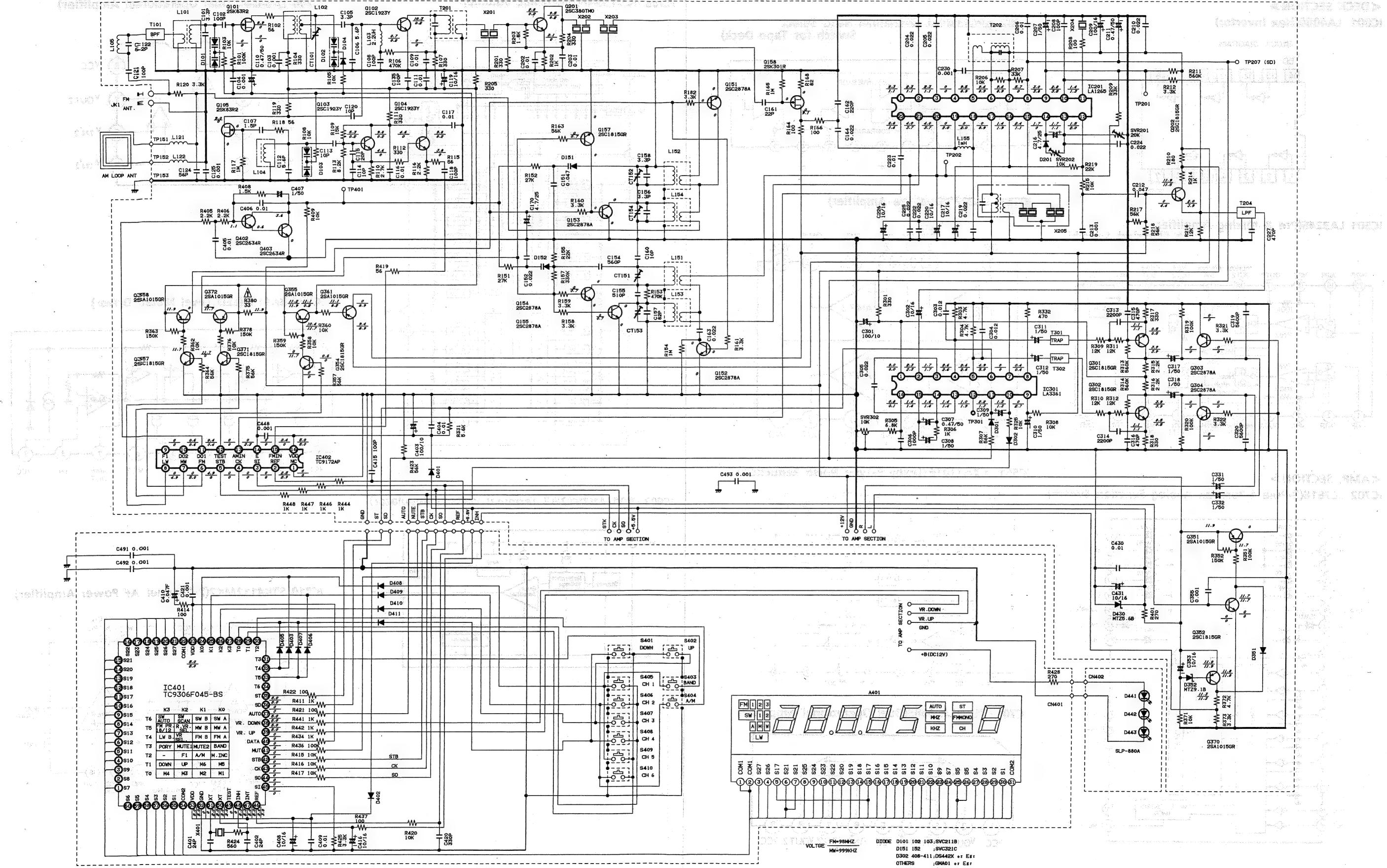
IC903·904 AN7812F(3 Terminal Voltage Regulator)



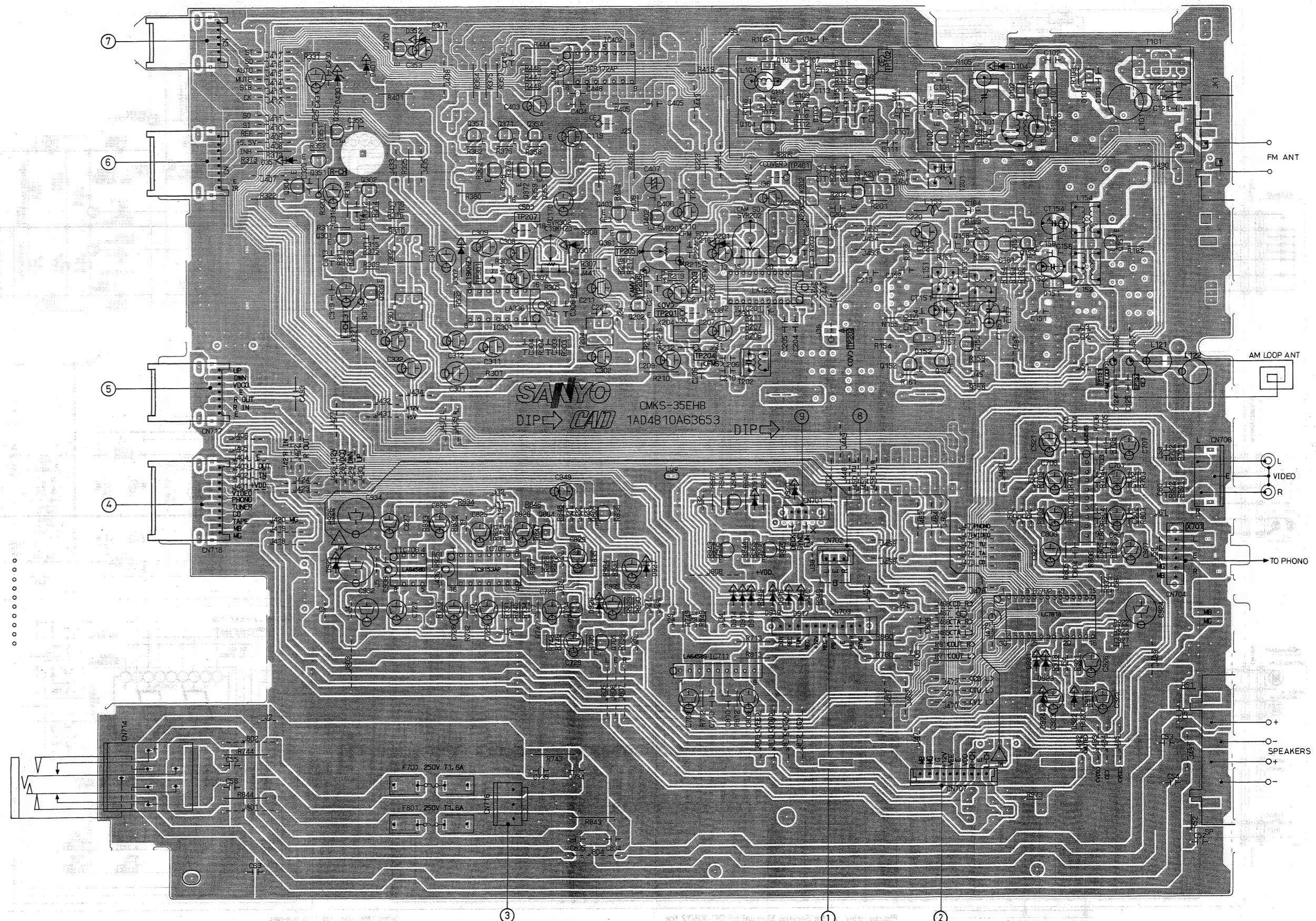
IC710 STK4112MK2(2-Channel AF Power Amplifier)



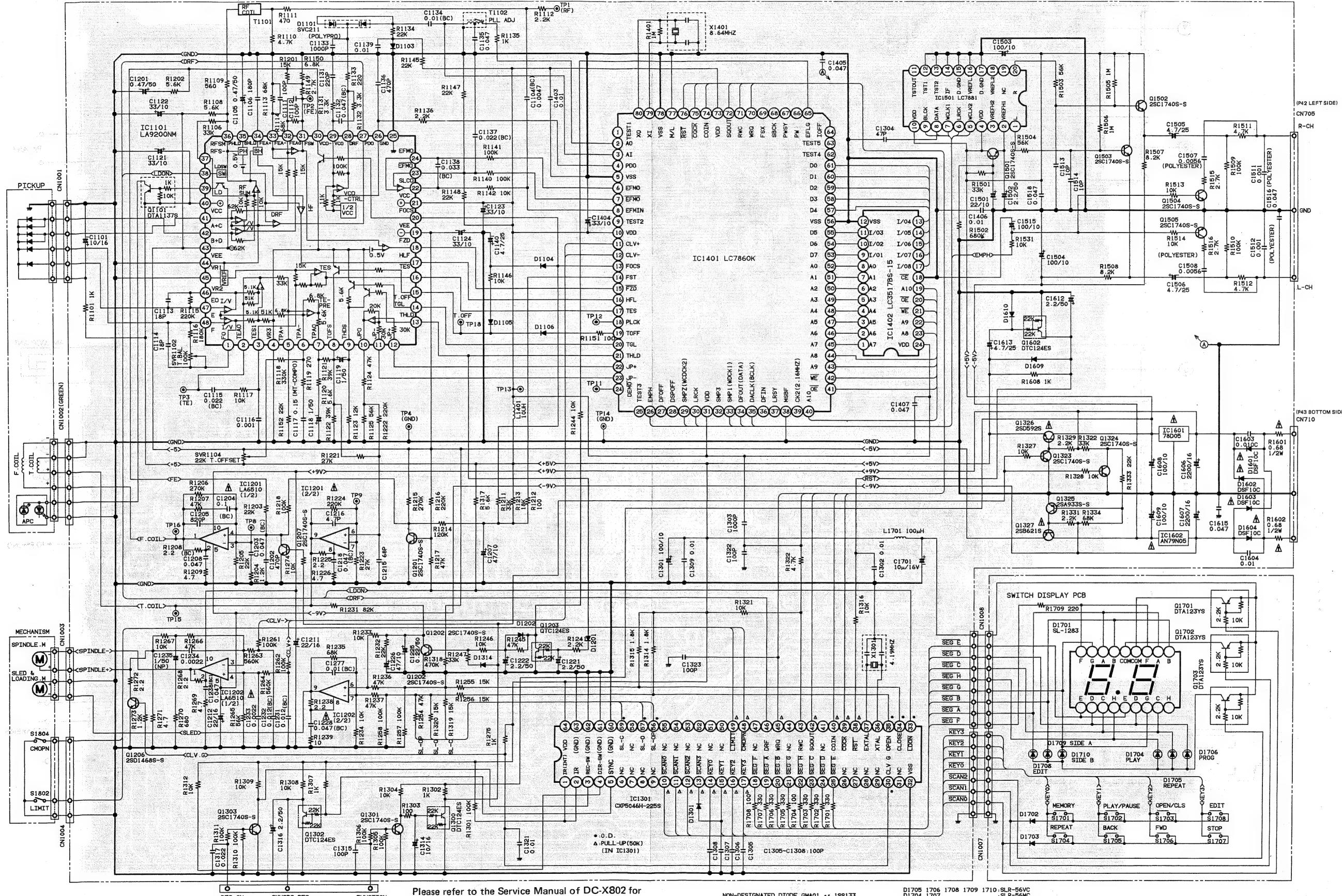
SCHEMATIC DIAGRAM (TUNER)



WIRING DIAGRAM (TUNER & PRE-AMP.)



SCHEMATIC DIAGRAM (CD)

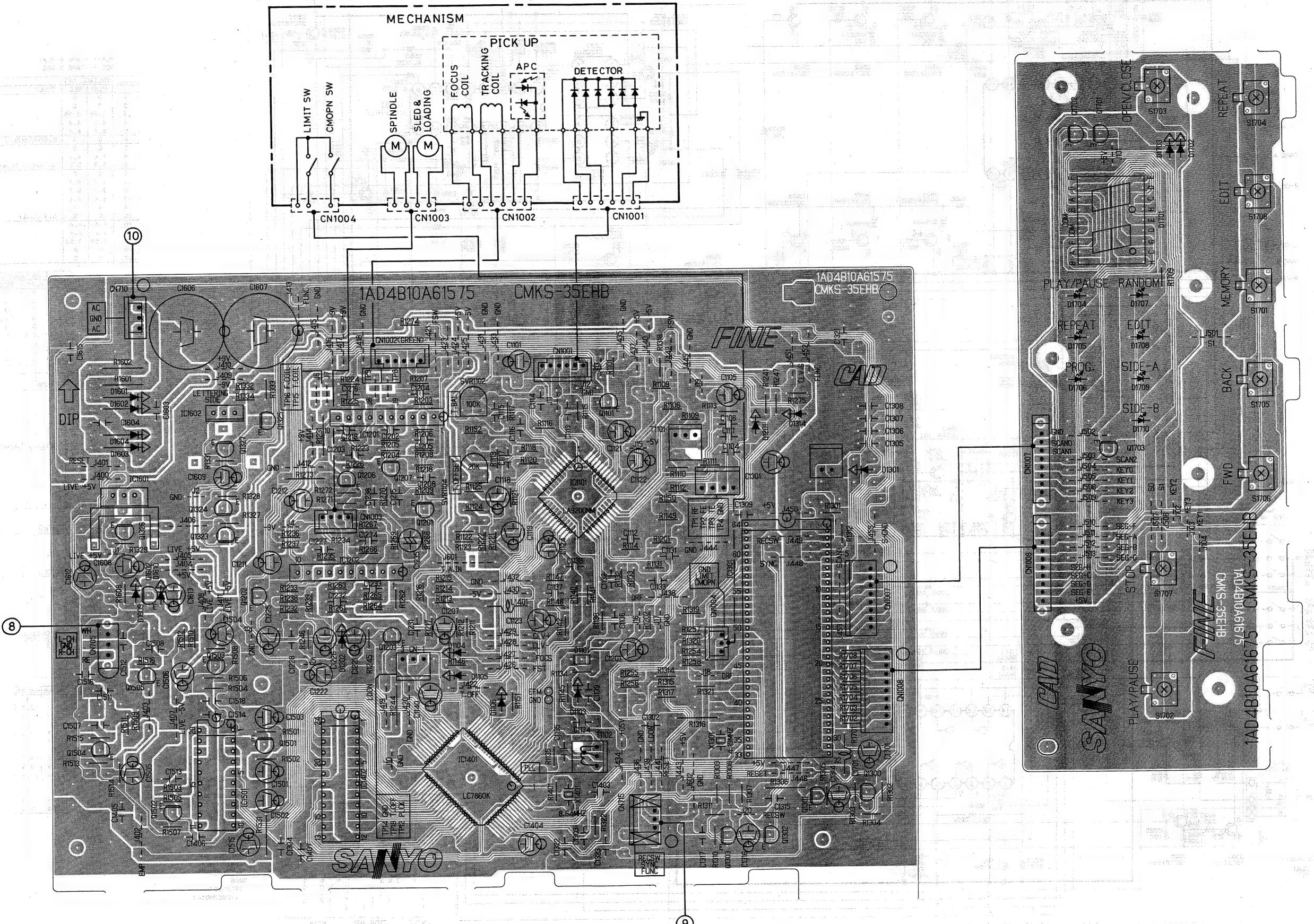


Please refer to the Service Manual of DC-X802 for waveform of test point.

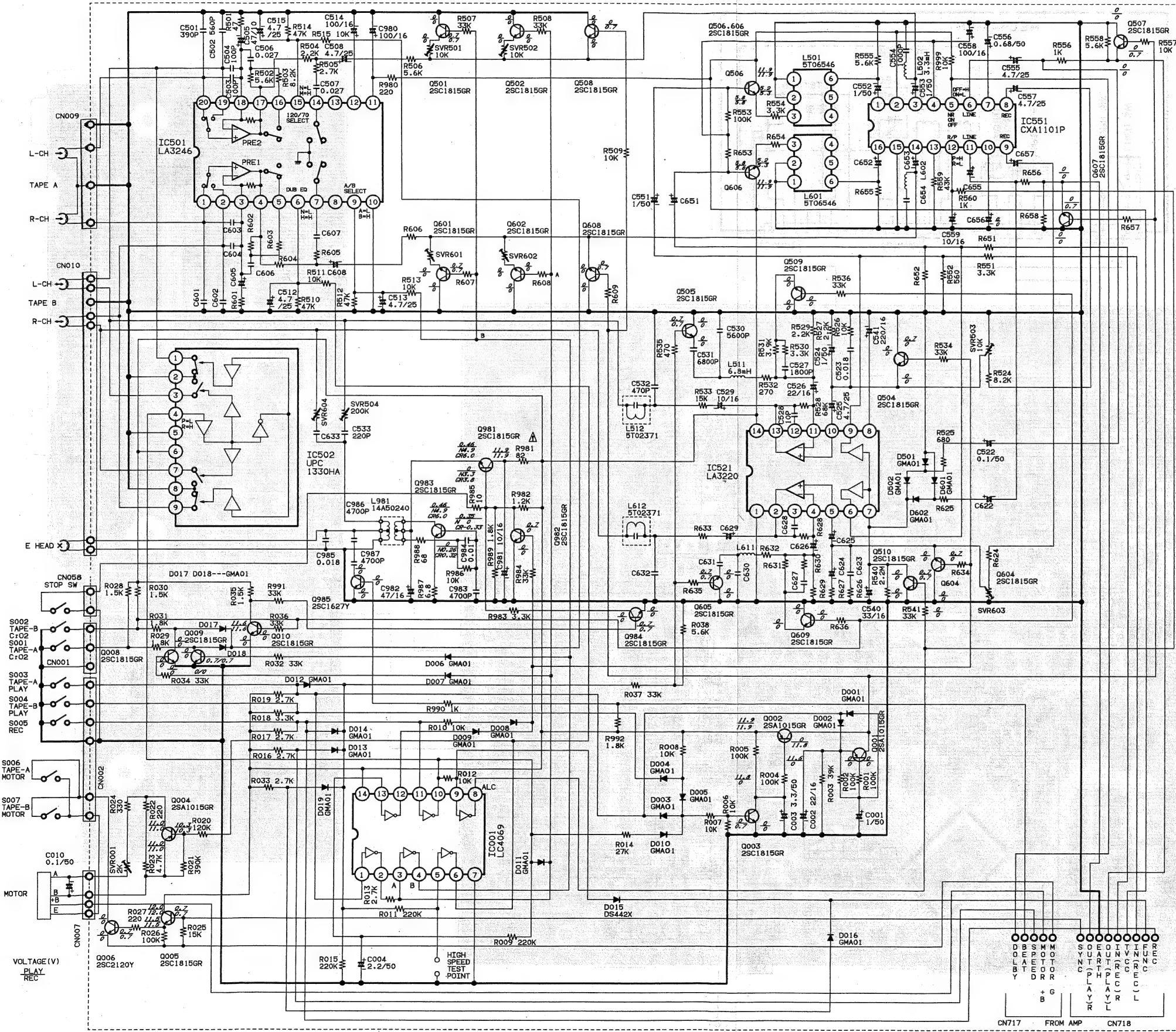
NON-DESIGNATED DIODE GMA01 or 1SS13

D1705 1706 1708 1709 1710 :SLR-56
D1704 1707 :SLR-56

WIRING DIAGRAM (CD)



SCHEMATIC DIAGRAM (DECK)



PLAY		TAPE B PLAY	
REC		TAPE B REC	
	VOLTAGE (V)		
501	PLAY	REC	OTHER
1	0	0	
2	0	0	
3	0.59	0.59	
4	4.4	4.4	
5	4.4	4.4	
6	0	0	5.9(HI.DUB.)
7	0	0	
8	4.4	4.4	
9	5.9	5.9	0(TAPE A PLAY)
0	0	0	
1	9.7	9.7	
2	9.7	9.7	
3	4.4	4.4	
4	0	0	
5	0	0	5.9(C:02)
6	4.4	4.4	
7	4.4	4.4	
8	0.59	0.59	
9	0	0	
0	0	0	

S001	TAPE A	SELECT SW	"C:02"	IC50
S002	TAPE B	SELECT SW	"C:02"	1
S003	TAPE A	PLAY SW	"OFF"	2
S004	TAPE B	PLAY SW	"OFF"	3
S005	TAPE B	REC SW	"OFF"	4
S006	TAPE A	MOTOR SW	"OFF"	5
S007	TAPE B	MOTOR SW	"OFF"	6

VOLTAGE (V)	
PLAY	REC
0	0
0	0
0	0
0	11.6
0	0
11.9	11.9
0	0
0	0
0	0

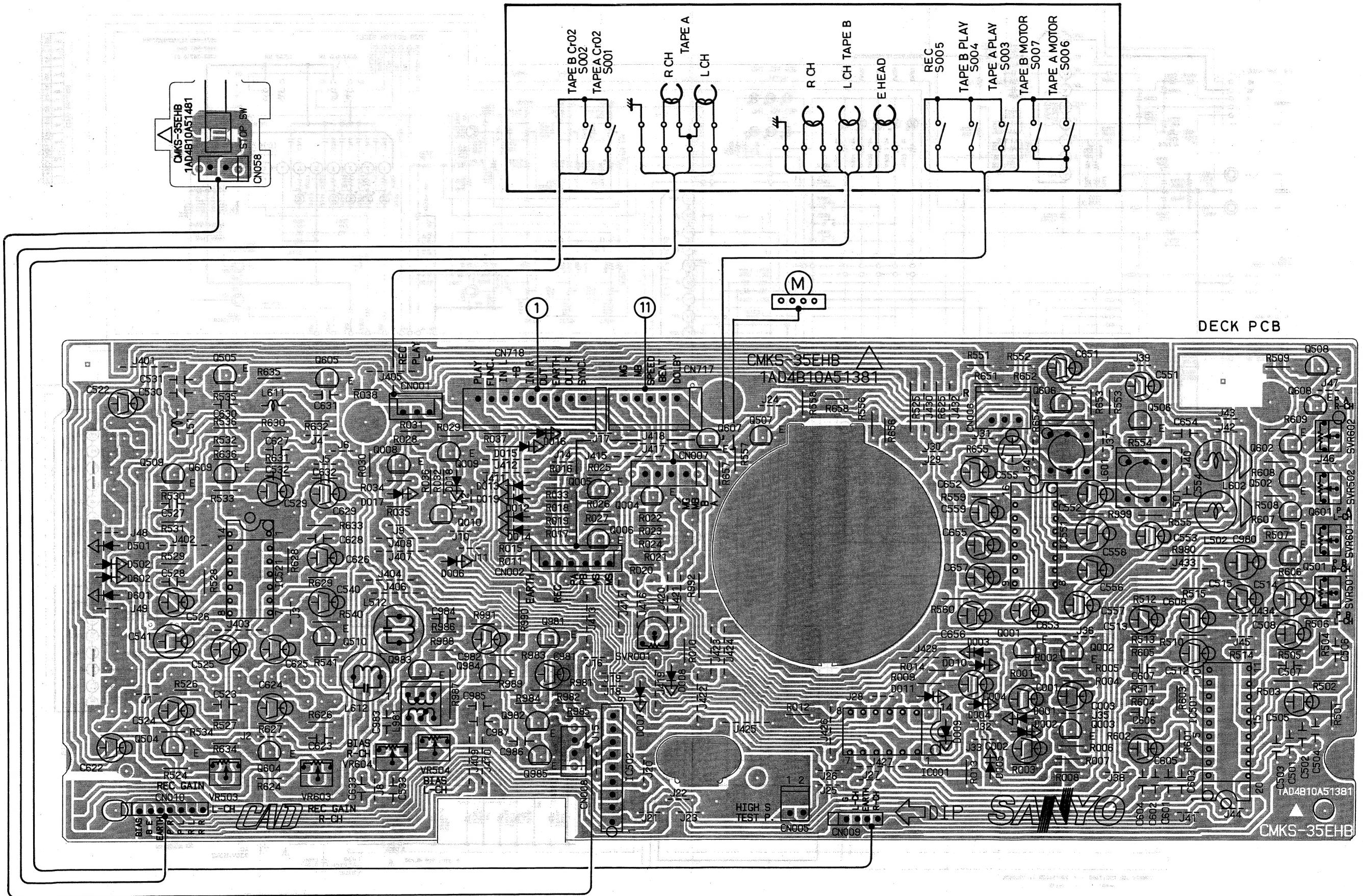
521	VOLTAGE (V)		OTHER
	PLAY	REC	
1	0	0	
2	0.59	0.59	
3	11.2	11.2	
4	5.9	5.9	
5	5.9	5.9	
6	0	0	
7	0	0	1.15(ALC DOING)
8	5.9	5.9	
9	0	0	
10	5.9	5.9	
11	5.9	5.9	
12	11.2	11.2	
13	5.9	5.9	
14	11.2	11.2	

	VOLTAGE (V)	
	PLAY	REC
1	6.0	6.0
2	11.9	11.9
3	6.0	6.0
4	6.0	6.0
5	11.9	11.9
		O(DOLBY DN)
6	6.1	6.1
7	0.4	0.4
8	6.1	6.1
9	6.1	6.1
10	0.4	0.4
11	6.1	6.1
12	11.8	0
		O(FUNCTION SW)
13	1.2	1.2
14	6.0	6.0
15	0	0
16	6.0	6.0
		(NON TAPE REC)

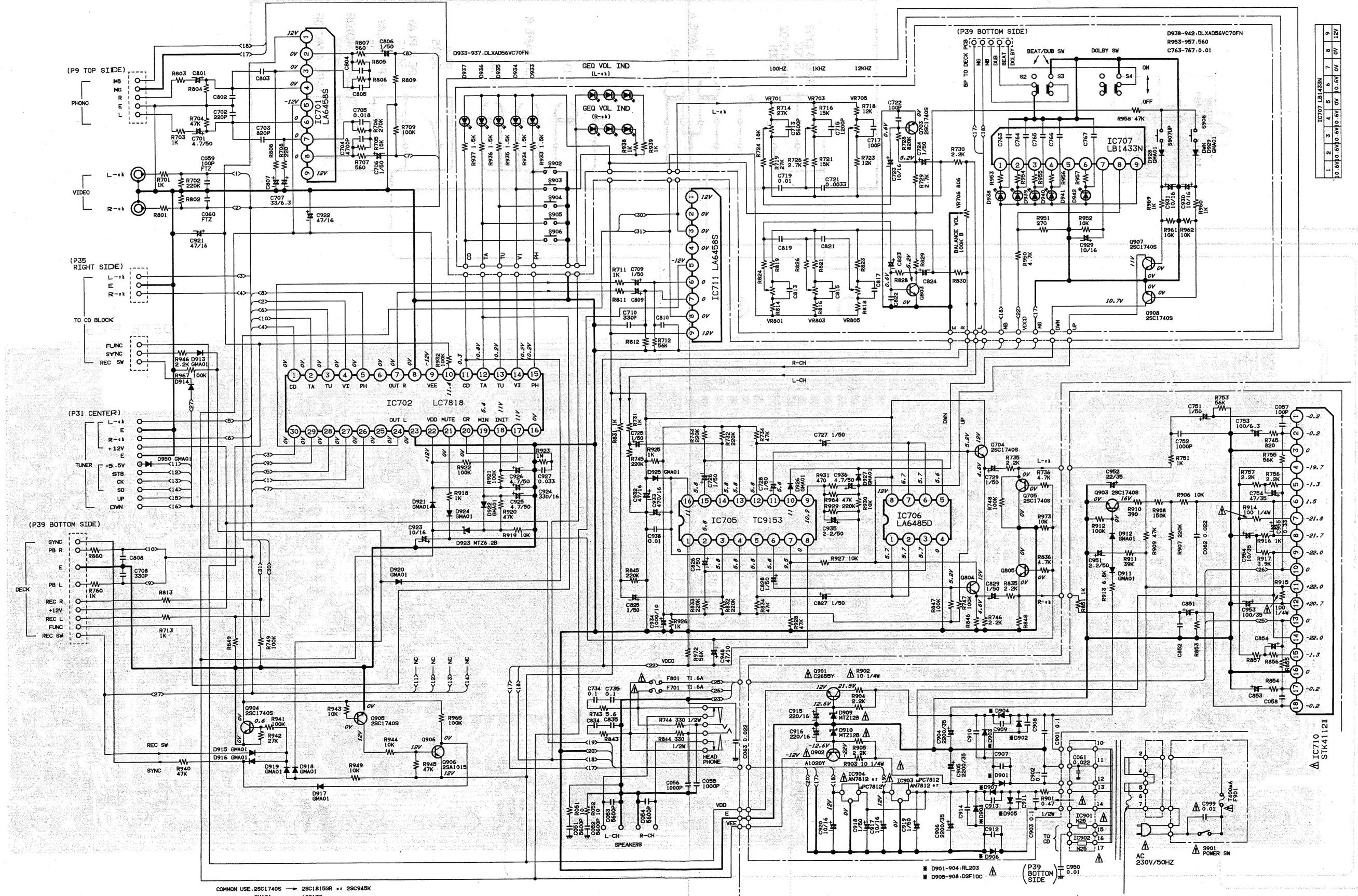
COMMON USE	IC001	VOLTAGE (V)			
		PLAY	REC	H.I.DUB	NOR.DUB
D001 002 003 004 005 006	1	11.3	11.2	0	0
007 008 009 010 011 012	2	0	0.35	12.0	12.0
013 014 016 017 018 019	3	0	10.4	11.0	11.0
501 601 502 602	4	11.8	0	0	0
GMA01 (*:1SS133)	5	10.7	10.5	0.4	9.6
D015	6	0	0	11.9	0
DS442X (*:1S2473)	7	0	0	0	0
	8	12.0	0	12.0	12.0
	9	0	11.1	0.6	0.6
	10	0	11.1	11.6	11.6
0501 601 502 602 504 604	11	11.5	0	0	0
505 605 506 606 507 607	12	11.9	0	0	0
508 608 509 609 510 982	13	0	10.8	11.4	11.4
984 003 005 008 009 010	14	12.0	12.0	12.0	12.0
2SC1815GR					

```
(+2SC945K+)2SC1740S)
0981 983
2SC1815GR
(+2SC945K)
0001 002 004
2SA1015GR
(+2SA733P)
Q006
2SC2120Y
(+2SC2001K)
```

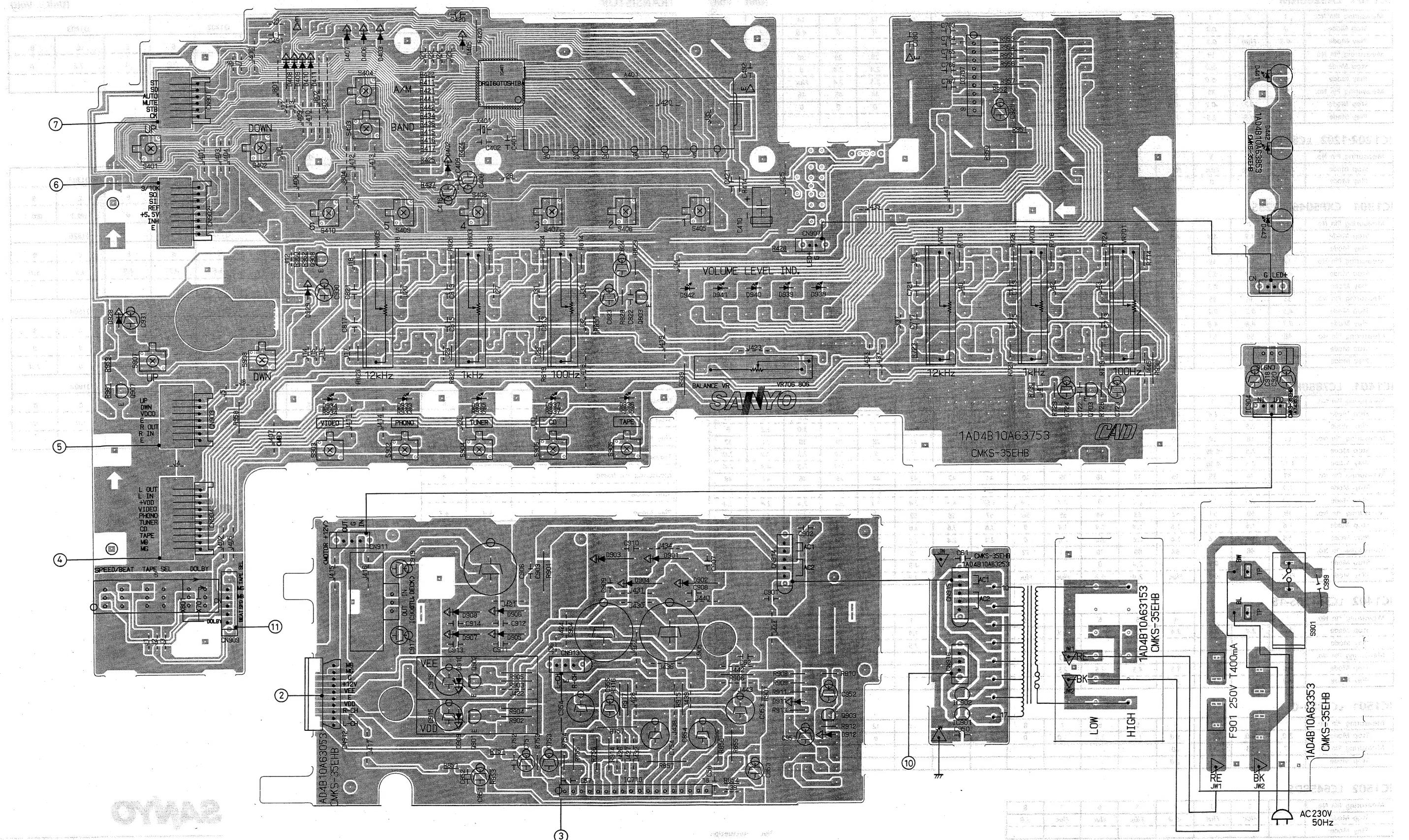
WIRING DIAGRAM (DECK)



SCHEMATIC DIAGRAM (PRE & MAIN AMP.)



WIRING DIAGRAM (FRONT & MAIN-AMP.)



VOLTAGES OF IC & TRANSISTOR

IC1101 LA9200NM

Measuring Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	(Unit : Volt)
Stop Mode	0	0.3	0	0	0	0	0	0	0	0	0	0	4.8	4.3	4.1	4.1	
Play Mode	-0.3	Fluc	0.2	0	0	0	0	0	0	0	0	0	0	0	3.8		
Measuring Pin No.	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
Stop Mode	4.1	4.0	-5.0	0	4.9	3.6	1.5	1.5	0	2.4	0	2.4	0	0	0	0.6	
Play Mode	0	4.0	-5.0	0	4.9	2.5	2.6	2.4	0	2.4	4.16	2.5	2.4	Fluc	-0.3	0.3	
Measuring Pin No.	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	
Stop Mode	0.6	0.2	-0.2	-0.1	0	4.2	4.9	5.0	0	0	-5.0	0	0	0	0	0	
Play Mode	0.3	0.8	2.9	1.7		0.3	-5.0	5.0			-5.0						

IC1202-1202 LC6510

Measuring Pin No.	1	2	3	4	5	6	7	8	9	10
Stop Mode	Fluc	Fluc	Fluc	Fluc	-9.8	Fluc	Fluc	Fluc	Fluc	9.7
Play Mode	0	0	0	0	-9.8	0	0	0.3	0.3	9.7

IC1301 CXP5046H-225S

Measuring Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Stop Mode	4.9	4.9	4.9	4.9	4.9	-	-	-	-	2	2	2	4.9	4.9	4.9	4.9
Play Mode	4.9	4.9	4.9	4.9	0.3	-	-	-	-	2	2	2	4.9	4.9	4.9	4.9
Measuring Pin No.	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Stop Mode	4.9	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3	-	-	-	-	3.0	-	0
Play Mode	4.9	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3	-	-	-	-	3.0	-	0
Measuring Pin No.	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Stop Mode	4.5	0.2	0.2	-	-	4.9	4.9	0	-	4.6	0	-	4.7	0	-	4.9
Play Mode	0.1	4.8	4.8	-	-	4.9	4.9	0	-	Fluc	0	-	Fluc	4	-	0
Measuring Pin No.	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Stop Mode	4.9	-	-	-	-	-	-	0.1	0	-	0	0	0	0	0	4.9
Play Mode	0	-	-	-	-	-	-	3.2	3.2	-	3	0	0	0	0	4.9

IC1401 LC7860K

Measuring Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Stop Mode		2.5	2.4	2.4	0	1.4	1.2	2.5	0	4.9			3.0	4.2	4.2	4.2
Play Mode		2.5	2.4	2.4	0	2.4	2.4	2.5	0	4.9	0.8	0	3.0	4.2	0	
Measuring Pin No.	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Stop Mode		2.5	4.86	0	0	0	0	0	0	0	0	1.0	2.5	4.9	2.0	
Play Mode		4.17	2.5	4.86								1.0	2.5	4.9	2.0	
Measuring Pin No.	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Stop Mode	1.0	2.0	2.4		2.4	0	2.4	2.4	3.57	4.5	2.4	2.4	2.4	2.4	2.4	2.4
Play Mode	1.0	2.3	2.4		2.4	0	2.4	2.4	3.57	4.5	2.4	2.4	2.4	2.4	2.4	2.4
Measuring Pin No.	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Stop Mode	1.6	1.6	1.6	1.6	1.4	1.4	1.4	0	3.6	3.6	3.6	1.6	3.6			
Play Mode	1.6	1.6	1.6	1.6	2.6	2.6	2.6	0	2.4	2.4	2.4	2.4	2.4			
Measuring Pin No.	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
Stop Mode	2.3	-	0.3		2.4	0			4.9		4.9	5.0	0	0	2.3	2.3
Play Mode	Fluc	-	0.3	Fluc	2.4	0.2	Fluc	Fluc	4.9	Fluc	4.9	5.0	0	0	2.3	2.3

IC1402 LC3517BS-15

Measuring Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Stop Mode	2.4	2.4	2.4	2.4	1.6	1.6	1.6	1.6	2.5	1.4	1.4	0	3.6	3.6	3.6	1.7
Play Mode										2.2	2.5		2.6	2.6	2.6	2.4
Measuring Pin No.	17	18	19	20	21	22	23	24								
Stop Mode	3.6	0	2.4	3.5	4.5	2.5	2.5	4.9								
Play Mode	2.3		2.4	3.5												

IC1501 LC7881-C

Measuring Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Stop Mode	2.0	4.0		5.0	1.0	2.5	1.0	0	2.3	5.0		0	0	0	0	
Measuring Pin No.	17															